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MASTER PLAN FOR CORRY STATION WITH TRANSMITTAL NAS PENSACOLA FL
1/10/1990
U S NAVY

NAVAL TECHNICAL TRAINING CENTER, CORRY STATION
MASTER PLAN
NAVAL COMPLEX PENSACOLA

NAVAL FACILITIES ENGINEERING COMMAND

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

IN REPLY REFER TO
11010
Ser 44E/0U591169
10 Jan 1990

although dated 01/90, the input was gathered in 87/88.

From: Chief of Naval Operations
To: Chief of Naval Education and Training
Commanding Officer, Navy Technical Training Center
Chief of Naval Technical Training
Commanding Officer, Southern Division, Naval Facilities Engineering Command

Subj: APPROVAL OF MASTER PLAN FOR THE NAVAL TECHNICAL TRAINING CENTER, CORRY STATION, PENSACOLA, FLORIDA

Ref: (a) OPNAVINST 11000.16A of 28 Apr 87

1. The Master Plan for the Navy Technical Training Center (NAVTECHTRACEN), Corry Station, Pensacola, is approved in accordance with reference (a).

2. No significant development constraints were identified which will restrict the projected needs and facility requirements of the NAVTECHTRACEN Corry Station. A major feature of the updated land use plan is the projected development of additional classroom, recreational, family housing, and administrative facilities. The goal is to create a more campus-like setting while still preserving a large number of existing pine trees.

3. This approval does not guarantee funding to execute the plan, but projects for future developments of the NAVTECHTRACEN Corry Station should conform to this plan. The activity, its major claimant, and its resource sponsor shall utilize this plan as a guide in channeling resources to improve productivity and readiness through the acquisition of new facilities, and the disposal of obsolete facilities.

4. All commands involved with the operations of NAVTECHTRACEN Corry Station participated in the development of this plan. However, it represents a point-in-time assessment of future requirements and will require periodic updating. If problems arise in implementing this plan, they should be made a matter of record with the next higher echelon of command or with the cognizant Engineering Field Division, as appropriate.

J. E. Burlington
J. E. BURLINGTON
By direction

Copy to:
CNO (OP-01, 441, 09BF)

NAVAL TECHNICAL TRAINING CENTER, CORRY STATION
MASTER PLAN
NAVAL COMPLEX PENSACOLA

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL TECHNICAL TRAINING CENTER, CORRY STATION
MASTER PLAN
NAVAL COMPLEX PENSACOLA

SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND

AND

NAVY PUBLIC WORKS CENTER
PENSACOLA, FLORIDA

MAY 1989

REVIEW COMMENTS
NTTC

ADDRESSEE	CONTACT	RESPONSE BY	COMMENT	ACTION
CNO OP-01	DAN SLOAN NAVFAC CODE 2002DS; ATVN 221-7345	Telcon 5/24/89	Dan Sloan contacted OP01. No comments from OP01.	None
CNO OP-441	LCDR DELAUDER 225-5065 (CEC IN PENTAGON)	Telcon 5/15/89	No comment	None
CNO OP-09246 (NOW OP-972C)	LCDR G.R. POLLITT	ltr 11000 Ser 972C/3224 2/10/89	Requested separate para for religious ministry facilities.	Incorporated
CMC LFF-1	P.C. HUBBELL	ltr 11010/2 LFL/0-162 2/8/89	No comment	None
CINCLANTFLT N4421	VIC PATTON N4421A; ATVN. 564-6129	Telcon 5/26/89	No comment	None
COMNAVMILPERSCOM NMPC-1162	R. SCHOLL NMPC-656D	ltr 2803 NMPC-656D 3/3/89	CIP comments	Child Care Center cost verified.
COMNAVDAC	CDR D.W. PALOMAKI	ltr 11000 Ser 20-00/0548 3/3/89	No comment	None
COMNAVTELCOM N4	G.A. MOHSBERG	ltr 11000 Ser 44D/4052 2/3/89	No comment	None
COMNAVSECGRU G-43	D.E. HALL	ltr 11000 Ser G431/1032 1/31/89	No comment	None
COMNAVSECINVCOM 09N			No reply	None
COMSPAWARSYSCOM 003-42	JOHN BOVE ATVN. 222-7234	Telcon 6/20/89 indicated Code 003.442 (Mr. McDuffie Sullivan) retired, no record that plan was received or reviewed.	No reply	None
TELEMGT DET EAST	MIKE SULLIVAN CODE 32 ATVN 565-1565	Telcon 6/9/89	No comment	None
CNET	CAPT. T.J. HEFFERNAN	ltr 11000 Ser N-411/0117 2/15/89	CIP comments	Incorporated
CNTECHTRA	W.L. CORNELL	ltr 11000 Ser N83/1629 2/15/89	No comment	None

REVIEW COMMENTS
NTTC CON'T

ADDRESSEE	CONTACT	RESPONSE BY	COMMENT	ACTION
NTTC, CO	LT M. FOSTER	Mark-up of previous ltr.	CIP; Tenants. Remove NAVRESSO, Resale Distribution Center from land use plan.	Incorporated. As requested proposed land use plan does not show site for NAVRESSO Distribution Center.
NAVFSSO FS3	J.R. HASTINGS	ltr E/7177 11103, 1/31/89	No comment	None
NAVRESSO STATEN ISLAND	G.E. MONROE (718)390-3971	ltr FD1:JJ:LW 3/1/89	Requested NAVRESSO Resale Distribution Center be sited at NTTC.	Per NTTC CO, NAVRESSO site not included in land use plan.
NASP	FRITZ/STROM	Oral Comments	Site NAVRESSO Resale Distribution Center at NTTC.	Not sited at NTTC per NTTC CO.
COMNAVFACENGCOM	R.E. MEYER	ltr 2002 4/4/89	No comment	None
SOUTHNAVFAC	R.L. LATTIMORE	ltr 11000 Code 202RL, 3/7/89	Short titles; Misc	Incorporated

EXECUTIVE SUMMARY

The Naval Technical Training Center (NAVTECHTRACEN) is one of several major naval activities located in the Pensacola Naval Complex. The official short title for Naval Technical Training Center is NAVTECHTRACEN; however, the term NTTC is more commonly known and is used throughout this master plan. In the performance of its assigned mission under the direction of the Chief of Naval Education and Training, NTTC occupies and is responsible for a major portion of the physical assets (buildings and land) at Corry Station, Florida. Corry Station, though initially commissioned as an air station in 1928, was subsequently converted to a Training Center for electronic warfare training. A portion of the original station has since been disposed of and is now the site of a relatively new campus for the Pensacola Junior College. Corry Station now encompasses some 604 acres of which 72 percent or 431.5 acres are utilized by NTTC. The remaining portions of Corry Station are used for other naval functions not under the direct command structure of NTTC (i.e., Naval Hosptial, Navy Shopping Mall and family housing). Though fixed-wing flight operations are no longer capable of being performed at Corry Station, many of the Station's original functions are still readily apparent by building architecture and the many remnants of runways and aircraft parking aprons.

Development Constraints

There are very few natural or man-made constraints affecting the definition or achievement of long-range planning objectives for NTTC. For the most part, existing functions and activities have evolved in a consistent and compatible manner. The site is relatively flat and free of any major restrictions on the use of remaining buildable land. Several tracts of pine stands exist in the remaining open areas between abandoned runways and are currently being managed pursuant to the Corry Station Forest Management Plan. With careful planning and siting of future facilities, the continued preservation of many of these wooded areas can be achieved.

A designated helipad exists in the southwest section of Corry Station primarily to serve the Naval Hospital. It does not, however, impose any impacts on existing development and with proper planning the designated approach zones can be protected from any future encroachments.

Findings

1. There are no significant development constraints to accommodate the projected needs and facility requirements of the Naval Technical Training Center.

2. Less than 10 percent of the existing building facilities are inadequate (i.e., incapable of being improved to a satisfactory and useful condition).

3. Off-base encroachments are minimal and questionable areas that do exist are capable of being resolved if joint military and community actions are initiated in the near future.

4. An effective separation of NTTC training functions from other activities at Corry Station (i.e., Naval Hospital, Navy Shopping Mall, and family housing) presently exists and is capable of being maintained in the future.

5. Sufficient buildable land areas exist at Corry Station which can accommodate additional mission requirements.

6. Any subsequent disposal of government property will not only preclude the ability to accommodate additional mission assignments, but could also significantly restrict NTTC's ability to maintain satisfactory security requirements.

Recommendations

A major feature of the updated land use plan is the projected development of additional classroom, recreational and administrative facilities in the area to the south of Entrance Road and west of Navy Exchange Road. With proper siting of facilities, a more campus-like setting can be achieved while still preserving a large number of the existing pine trees. With this ultimate development an extension of the existing secondary road system will be required to better serve the west and southwest portions of Corry Station.

Additional family housing is proposed along U.S. Highway 98 between the existing family housing area to the east and the Naval Hospital to the west. Additional family housing to serve the Pensacola Naval Complex is required to provide quarters for lower-grade enlisted personnel and for replacement housing if a program is carried out to relocate family housing units at NAS Pensacola which are presently located in high level noise zones.

A sufficient buffer zone is to be maintained along each station boundary to minimize potential impacts between on-base and off-base land use activities. This is particularly true along the northern and western boundaries. In addition, a joint military and community effort needs to be initiated for the redevelopment and enhancement of the Entrance Road area between New Warrington Road and the NTTC main (east) gate.

ACTIVITY MASTER PLAN
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INTRODUCTION

The Naval Technical Training Center (NTTC) Corry Station is located in Escambia County in the westernmost part of the Florida Panhandle, and lies five miles west of downtown Pensacola and two miles north of the Pensacola Naval Air Station (NAS Pensacola). The main gate to NTTC is accessible from New Warrington Road which is a major north-south roadway that is located approximately one-quarter mile to the east of the eastern Corry Station boundary. The southern boundary of Corry Station is defined by U.S. Highway 98 which is a major east-west arterial across the State of Florida. (See Figure I-1)

Corry Station covers 604 acres, with the NTTC occupying the largest portion: 431.5 acres, or 72 percent. NTTC shares Corry Station with the Naval Hospital (42.5 acres), family housing (88.5 acres) and the Navy Shopping Mall (41.7 acres).

Mission Statement

The NTTC's mission is to train officers and enlisted personnel of the Department of the Navy, and personnel of other services and agencies, in cryptology, electronic warfare, photography and related subjects. This mission has been assigned by the Chief of Naval Education and Training (CNET) through the Chief of Naval Technical Training. The NTTC organization currently consists of seven departments, four detachments, two detachment representatives and several staff positions.

Purpose and Objectives

An activity master plan analyzes facts about the activity and about the natural and man-made environment in which it operates, optimizes compatible land use arrangements to achieve efficient and effective operations, and recommends specific steps to be carried out to accomplish the desired plan. In short, the plan says, "Here is what we have, here is what we do now and what we expect to do in the future, here is how we can best use what we have to do what we need to do, and here is how we can do it." Flexibility, practicality and comprehensiveness are essential elements of a realistic plan.

The primary objective of any military master plan is to preserve and enhance the ability of that particular installation to fulfill its assigned mission. Consequently, the military requirements take precedence over ancillary and support functions even though each of these functions may have assigned missions of its own. The ability to perform these primary military functions in an efficient and cost-effective way also is an overriding objective, as is maintaining the most pleasant environment in which these activities take place.

Beyond these broad objectives, there are a number of specific objectives that the master plan for the NTTC Corry Station attempts to achieve. These are to:

1. Maximize utilization of existing facilities;

2. Retain traditional use areas;

3. Separate hazardous facilities from populated areas;

4. Maintain security for sensitive functions and control of access;

5. Maintain adequate, efficient and economical utility support;

6. Maintain compatibility with off-base land uses;

7. Maintain consistency with previous installation master plans and other related plans;

8. Provide flexibility to respond to unforeseen long-range needs;

9. Preserve and maintain cultural and natural resource areas;

10. Improve traffic flow entering and leaving the base during peak hours; and

11. Separate visitor traffic from military and employee traffic.

Master Plan Format

The master plan narrative report is organized in a logical progression to readily explain to the reader why and how the plan was developed and how it may be carried out. Though the preceding chapter gives a general overview of the major findings and recommendations relative to the updated NTTC master plan, it is necessary to review the following chapters for a more in-depth understanding of how these conclusions were reached.

Chapter II provides a discussion of the Pensacola Naval Complex, of which NTTC is only one activity. This regional profile gives the reader an appreciation of the significance of the Navy's presence in Pensacola as well as an understanding of the broader planning issues, constraints and opportunities that need to be considered in determining future planning goals for NTTC. Naval activities, other than NTTC, normally envisioned when reference is made to the "Pensacola Naval Complex" include:

Naval Air Station, Pensacola (NAS) - or commonly known as NASP
Navy Public Works Center (PWC) - or commonly known as NPWC
Naval Supply Center (NSC)
Naval Aviation Depot (NAVAVNDEPOT) - or commonly known as NADEP
Naval Hospital (NAVHOSP)
Saufley Field

Each of these activities are the subject of a separate master plan report prepared for their respective areas of concerns and future facility requirements.

Of the remaining chapters in this master plan report there are two which are of significant importance. These are Chapter VI (Proposed Land Use Plan) and Chapter IX (Capital Improvements Plan).

The Proposed Land Use Plan is a map illustrating the optimal spatial arrangement of land uses, accompanied by explanatory narrative. It is a guideline for decision-making showing generalized relationships of the various land uses which will need to be accommodated on base in the future. It is essential that the narrative be recognized as being as much the plan as is the map, since the text contains the criteria and considerations used to evaluate needs and relationships. The map, therefore, is only one expression - albeit the preferred one - of an optimal land use arrangement to be achieved at an unspecified time in the future.

The Capital Improvements Plan (CIP), on the other hand, is a more site specific, shorter-term planning tool with which budgeting decisions can be made to build toward the land use plan over a period of time. As a minimum, an activity's capital improvements plan should incorporate all projects included in its proposed five year military construction program. The CIP is dynamic, in that it should be reviewed and updated at least bi-annually. It is the only portion of the activity master plan that is project and location specific.

Methodology

The activity master plan must be updated periodically in order to: provide a credible basis for future development decisions, ensure logical and efficient use of facilities and real estate, and guide activity growth and changes. Such updates may be triggered by significant changes in base loading, in mission changes, or in consideration of new federal mandates.

This plan is the second update, the first being done in 1980. The timing of this plan has, in part, been influenced by mission expansion and base loading increases anticipated as a result of homeporting and other factors. The NTTC master plan also incorporates relevant concepts from the Base Exterior Architecture Plan (BEAP) prepared in 1983 and the Natural Resources Management Plan.

The process of updating the activity master plan is straight forward. Planners and engineers were required to evaluate data supplied by respective command and tenant activities and to collect additional background data as necessary. The previous master plan was used as a starting point. Projected basic facility requirements were identified based on an evaluation of mission assignments, assigned number of personnel, ships, aircraft and other relevant variables from which a determination was made as to the type and quantity of facilities needed. These requirements when compared with existing assets identify the deficiencies that need to be planned and programmed over the ensuing master planning period. For the Pensacola Naval Complex Master Plan update this planning period is for five years or through Fiscal Year 1992. These requirements, when considered in the context of on-base and off-base development constraints and of the various planning objectives, led to the formulation of several spatial relationship concept plans, described in the Pensacola Naval Complex Master Plan, Concept Plan Summary.

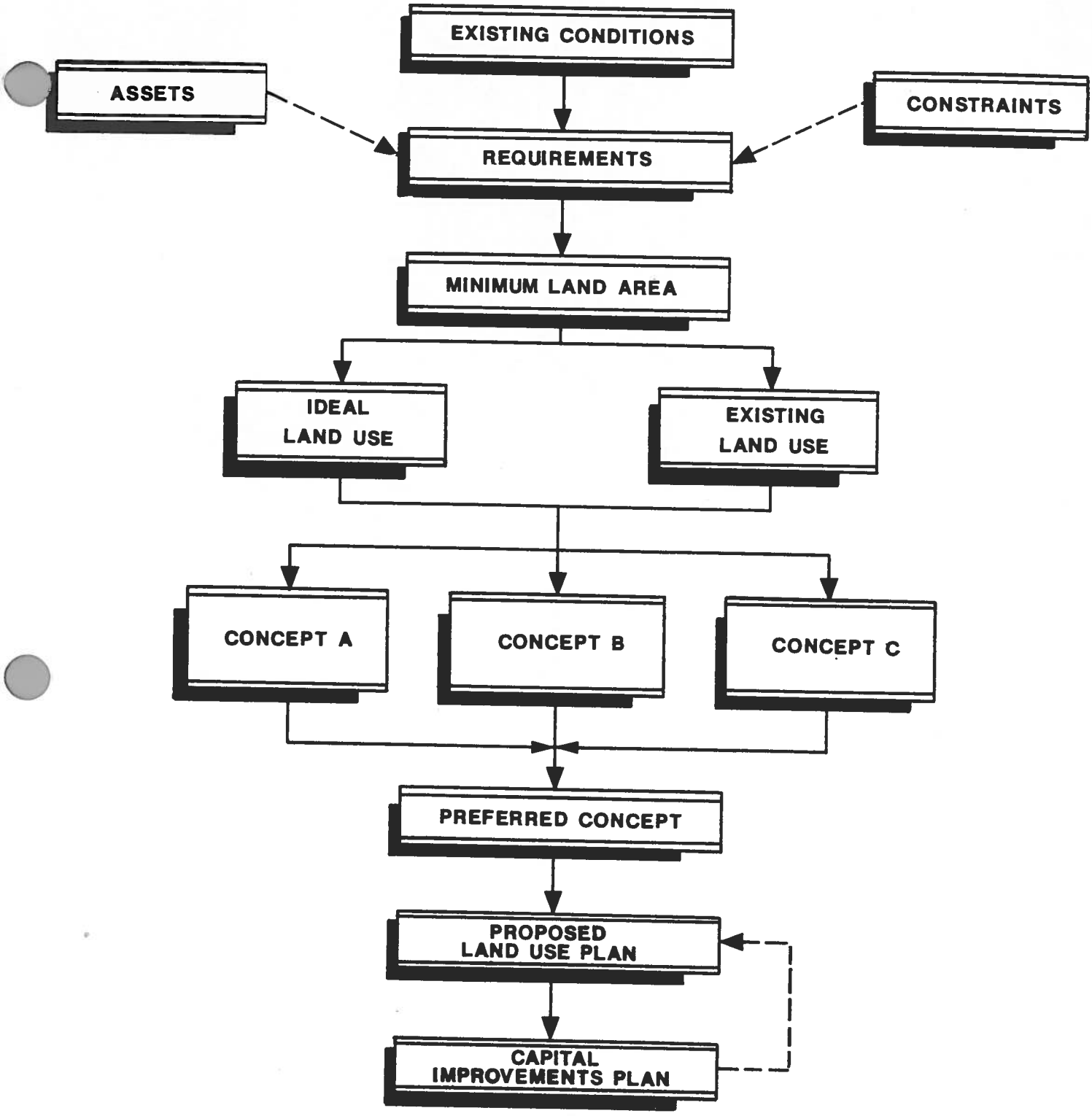
The concept plans were developed by translating minimum land area and building facility requirements into alternate spatial arrangements of functional land use activities. In comparing these alternate spatial arrangements with existing conditions, desired objectives and fiscal constraints, it was possible to arrive at a forward thinking, but obtainable land use arrangement. The preferred concept thus becomes the basis for the development of a more site specific land use plan in which all of the projected future facilities can be reasonably sited and constructed. The implementation of the land use plan is accomplished with subsequent military construction projects as identified and scheduled in the Capital Improvements Plan.

This master planning process, as shown graphically in Figure I-2, culminates in the preparation and submittal of a master plan report, such as this report, for the NTTC. The adopted master plan is then submitted to the major claimant for concurrence and ultimately to the Chief of Naval Operations (CNO) for approval.

Planning Assumptions

The preparation of the NTTC Corry Station Activity Master Plan was guided by the following assumptions:

- Base loading and facility requirements are based on FY 1992 projected requirements.



ACTIVITY MASTER PLANNING PROCESS

FIGURE I-2

- Facilities required to support respective command mission statements were developed in accordance with NAVFAC P-80, Facility Planning Criteria for Navy and Marine Shore Installations.

- Gulf Coast Homeporting master plan requirements have been incorporated.

REGIONAL LOCATION

Pensacola, Florida

FIGURE II-1

REGIONAL PROFILE

Locational Characteristics

The Pensacola Naval Complex consists of a concentration of diverse but interrelated activities conducted at sites surrounding the city of Pensacola, Florida. For the purpose of this report these sites are limited primarily to Naval Air Station, Pensacola; Corry Station; and Outlying Fields Bronson and Choctaw. Saufley Field, though an integral part of the Pensacola Naval Complex, is discussed in more depth as part of its own activity master plan report.

Each of these sites are located in Escambia County with the exception of Outlying Field Choctaw which is in Santa Rosa County, Florida. Due to the predominant concentration of facilities within the two Florida counties near the city of Pensacola, the complex not only has a strong locational identity but also a strong physical, social and economic interdependence with these governmental jurisdictions.

Escambia County is Florida's westernmost county and lies between the State of Alabama to the west and Santa Rosa County, Florida to the east. The State of Alabama also forms the northern boundaries of both counties and is approximately 50 miles north of their southern limits at the Gulf of Mexico shoreline. Pensacola is the county seat of Escambia County and is the largest city in both land area and population as well as the leading industrial center of western Florida. The city occupies 24 square miles, situated on Pensacola Bay seven miles from the Gulf of Mexico and 15 miles east of the Alabama border. Pensacola's location within the southeastern United States region is shown on Figure II-1.

Historical Perspective

The Naval Air Station and related facilities comprising the Naval Complex at Pensacola, Florida have a very significant and colorful history. The flags of Spain, France, Great Britain, the Confederacy and the United States have flown over the port that got its name in 1559. In that year, a Spanish explorer, Don Tristan de Luna founded a colony in this locale on a bluff located on the present Naval Air Station. The colony was short-lived and a permanent settlement was not established until 1698 near the original site with the construction of Fort San Carlos. The settlement was captured by the French in 1719 but recaptured by Spain three years later. The British took the settlement in 1763 and began the planning of a city which was recaptured by the Spanish in 1781. The ensuing 41 years were turbulent for the small city as its rule fluctuated between Spain and the United States before Spain finally ceded Florida to the United States in 1821. The city's noteworthy history is commemorated annually by a festival known as the Fiesta of Five Flags. Historic structures within the city and on the Naval Air Station

grounds have been recognized and listed in the National Register of Historic Places.

The first action to establish a Navy presence at Pensacola occurred over 150 years ago. In 1825, President John Quincy Adams and Secretary of the Navy, Samuel Southard arranged to build a Navy yard on the southern tip of Escambia County. Construction began in April 1826, and the Pensacola Navy Yard became one of the best equipped naval stations in the country. Although the station survived severe destruction during the Civil War and again in 1906 from a hurricane and tidal wave, it took an epidemic of yellow fever to finally bring about the yard's decommissioning in 1911. Ironically, at about that time, interest was beginning to grow in the military possibilities of naval aviation. In 1913, a study board appointed by then Secretary of the Navy, Josephus Daniels, recommended establishment of the first U.S. Naval Air Station on the site of the abandoned Navy yard. Thus began a program of facility development and training which has served well our Nation and the world in both war and peacetime circumstances. The addition of auxiliary fields at Corry, Saufley, Bronson, Barin, and Whiting all named after early aviators, enabled Pensacola to reach an all-time high in 1944, when 12,010 men completed flight training and flew a combined total of almost two million hours.

Real Estate Involved

The scope of this master plan is limited to the following sites:

Naval Air Station Pensacola (Mainside Complex)

The term "mainside complex" is often used in referring to the land and facilities within the boundaries of Naval Air Station Pensacola. The property so defined is owned by the Navy and consists of 5,589 acres of land. It is a peninsula located approximately five miles from downtown Pensacola in Escambia County. The site is bounded on the south by the Gulf of Mexico and Pensacola Bay, on the east by Pensacola Bay, and on the north by Bayou Grande. A bridge connects NAS Pensacola to a suburban Pensacola community known as Warrington. The bridge is an extension of Navy Boulevard (SR 295).

Naval Technical Training Center, Corry Station

Corry Station is located two miles north of NAS Pensacola. Navy Boulevard runs north and south near the station's east boundary and U.S. Highway 98 runs east and west along the southern boundary. Originally commissioned as an auxiliary air field, Corry Station is no longer used for aircraft operations. With a total site area of 604 acres, the station is of sufficient size to accommodate a number of activities. The Naval Technical Training Center, occupying 431.5 acres, is the largest host activity at Corry Station. The Navy Public Works Center utilizes 88.5 acres to provide family housing for Navy personnel. The Naval Hospital compound, established in 1976, encompasses 42.5

Naval Aviation Museum (NAVAVMUSEUM)
Navy Publications and Printing Service Detachment Office (NPPSO DET)
Base Veterinarian (ARMY)
Transportation Equipment Management Center, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM)
Naval Oceanography Command Detachment (NAVOCEANCOM DET)
Consolidated Civilian Personnel Office (CCPO)
Marine Aviation Training Support Group (MATSG)
USS LEXINGTON (CV-16)(Depart 12/90)
USS KITTY HAWK (CV-63)(Arrive 4/91)
Naval Technical Training Center Detachment (NAVTECHTRACEN DET)
Navy Flight Demonstration Squadron (NAVFLIGHTDEMRON)
Naval Construction Battalion Unit 402 (CBU-FOUR ZERO TWO)
Naval Aviation Engineering Service Unit Detachment (NAESU DET)
Navy Recruiting Command Quality Assurance Team (COMNAVCRUITCOM TANGO THREE FOUR QAT)
Defense Reutilization and Marketing Office (DRMO)
Craft of Opportunity Mine Unit, Squadron 2211 (COOP)
Defense Investigation Service (DIS)
Naval Education and Training Support Center Atlantic for Navy Campus (NAVEDTRASUPPCENLANT)
Naval Air Reserve Recruiting Office (NAVRESCRUITO)
Naval Air Systems Command, Weapons System Detachment (NAVAIRSYSCOM DET WSM)
Naval Education and Training Security Assistance Field Activity (NETSAFA)
Medical Branch Clinic (BRMEDCLINIC)
Navy Comptroller Standard Systems Activity (NAVCOMPTSSA)
Navy-Marine Trial Judiciary Circuit Branch Office (NAVMARTRIJUDCIRBROFF SOUTHEAST)
Navy Passenger Transportation Office (NAVPTO)
Navy Office of Technology Transfer and Security Assistance Detachment Pensacola (NAVOTTSA DET)
Regional Environmental Health Office (PREVMED)
Personnel Support Activity (PERSUPPACT)
Personnel Support Activity Detachment (PERSUPP DET)
Supervisor of Shipbuilding, Conversion, and Repair, U.S. Navy (SUPSHIP)
Technical Support Center, Joint Oil Analysis Program (JOAP)

In addition, the following non-defense related agencies are located within the Naval Air Station:

American Red Cross Field Office
Barrancas National Cemetery
Florida Division of the Blind
First Navy Bank
LIFECO Travel Service
McDonald's Restaurant
National Seashore Park

National Weather Service
Navy Relief
Pen Air Federal Credit Union
Pensacola Junior College
Scheduled Airline Ticket Office
Troy State University
United Services Organization
University of West Florida
U.S. Coast Guard Lighthouse
U.S. Coast Guard Station
U.S. Postal Service

The above list of major tenant commands and organizations supported by NAS Pensacola includes an appropriate short title for each activity as identified in the U.S. Navy Plain Language Address Directory. However, a number of the major local commands are more frequently identified by a modified version of these official short titles. The more common abbreviations used locally are as follows:

NPWC = Navy Public Works Center
NADEP = Naval Aviation Depot
NTTC = Naval Technical Training Center
NASC = Naval Aviation Schools Command
NAMI = Naval Aerospace Medical Institute
NAMRL = Naval Aerospace Medical Research Laboratory

For ease of local recognition these more common terms are used throughout the remainder of this master plan report when referring to the respective commands and organizations.

Navy Public Works Center

Public works functions were originally performed by the public works departments of the various commands. In 1963, the public works departments of the Naval Air Basic Training Command and NAS Pensacola were combined and designated as a Public Works Lead Shop.

On July 1, 1965, the Secretary of the Navy established the Navy Public Works Center, Pensacola (NPWC). Command of NPWC was delegated to the Chief of Naval Air Basic Training, then located at NAS Pensacola. The Chief of Navy Material, through the Chief, Bureau of Yards and Docks, was assigned primary support responsibility.

The Navy Public Works Center began operation under the Navy Industrial Fund Charter on July 1, 1967. Command of NPWC passed to the Chief of Naval Material, through the Commander, Naval Facilities Engineering Command at that time.

Class I Property relating to family housing and all public works-type Class II property was transferred from NAS Pensacola to the Navy Public Works

Center, Pensacola on October 31, 1967. Administration, maintenance and material functions were consolidated into a new Public Works facility in July, 1976.

Military command and coordination control of NPWC passed to the Chief of Naval Education and Training in July, 1987. Technical control remains with the Commander, Naval Facilities Engineering Command.

The Navy Public Works Center, Pensacola has no tenant commands or supported units.

Naval Technical Training Center

The Naval Communications Training Center was established at Corry Station in 1961 following the decommissioning of Corry Field as an auxiliary air field in 1958. The command was redesignated as the Naval Technical Training Center in 1973 when responsibility for electronic warfare training and the Naval School for Photography were added to the command's assigned mission.

The assigned mission of the Naval Technical Training Center, Corry Station, is to administer those schools assigned by the Chief of Naval Education and Training to train officers and enlisted personnel of the Department of the Navy and personnel of other services and agencies in cryptology, electronic warfare, photography and related subjects.

The Naval Technical Training Center, Corry Station, is host to the following supported units:

Company "K" Marine Support Battalion
Defense Investigative Service Office, Corry Branch
Management Information and Instructional Systems Activity Unit
Naval Education and Training Program Management Activity Detachment
Naval Electronics Systems Engineering Center Detachment
Naval Electronics Systems Security Engineering Center Detachment
Naval Hospital Branch Clinic
Naval Investigative Service Resident Agency
Naval Reserve Security Group Activity Northwest 110
Naval Security Group Field Office
Naval Training System Center, Regional Office, Atlantic, Pensacola Field Engineering Division
Navy Campus for Achievement
Navy Exchange Branch, NTTC Corry Station
Naval Dental Clinic Branch Clinic
Personnel Support Activity Detachment, NTTC Corry Station
Resident Officer in Charge of Construction, Corry Station
Training Development Unit
USAF 3482nd Technical Training Squadron
U.S. Army Intelligence School Detachment
NAVAL SECURITY GROUP DETACHMENT

In addition, the following non-defense related agencies are located at the Naval Technical Training Center, Corry Station:

Florida Department of Health and Rehabilitative Services,
Pensacola Boy's Base
Pen-Air Federal Credit Union Branch
Scheduled Airline Ticket Office
U.S. Postal Service
Warrington National Bank

Naval Hospital

Navy medicine has been practiced in the Pensacola area since the early nineteenth century. The Naval Aerospace and Regional Medical Center was established in the southwest quadrant of Corry Station in March, 1976. This command was redesignated as the Naval Hospital, Pensacola in March, 1983.

The assigned mission of the Naval Hospital, Pensacola includes the following primary functions:

- Provide a comprehensive range of emergency, outpatient and inpatient health care services to active duty Navy and Marine Corps personnel and active duty members of other Federal Uniformed Services.
- Provide, as directed, health care services in support of the operation of the Navy and Marine Corps shore activities and units of the Operating Forces.
- Participate as an integral element of the Navy and Tri-Service Regional Health Care Systems.

Other Federal Activities and Agencies

Several Department of Defense activities are located in the environs surrounding Pensacola and interact with the activities that compose the Pensacola Naval Complex. The most significant, in terms of the level of interaction, is Saufley Field.

At Saufley Field, activities which interact at an administrative level with Pensacola Naval Complex activities include the Navy Comptroller Standard Systems Activity, Management Information and Instructional Systems Activity and the Naval Education and Training Program Management Support Activity.

NAS Whiting Field is headquarters for Training Air Wing 5 and Helicopter Training Squadrons 8 and 18, and VT-2, VT-3 and VT-6. Interaction between NAS Whiting Field and the Pensacola Naval Complex occurs at several levels. At an operational level, there is substantial interaction in regards to the safe and efficient utilization of airspace for flight training operations. Pensacola

Naval Complex activities such as the Naval Supply Center, Navy Exchange and Commissary Store Region serve NAS Whiting Field at a logistical level. At the medical level, the Naval Hospital and Naval Aerospace Medical Institute provide medical services to NAS Whiting Field personnel. Students at the Naval Aerospace Medical Institute rely on NAS Whiting Field for their flight training.

Eglin Air Force Base (AFB) also is in the vicinity of the Pensacola Naval Complex. Interaction between these activities is minimal. However, the Naval Aviation Schools Command utilizes portions of Eglin AFB for land survival training. OLF Choctaw, one of the Pensacola Naval Complexes outlying fields, is within the boundaries of Eglin AFB.

The Pensacola Naval Complex also provides limited support to the Naval Coastal Systems Center at Panama City, Florida and the Navy and Marine Corps Reserve Center in Mobile, Alabama. The U.S. Army Corps of Engineers, Mobile District, exercises jurisdiction over some physical development activities within the Pensacola Naval Complex.

The Mobile, Alabama area will see significant development of naval facilities under the Gulf Coast Strategic Homeporting Plan. These new activities will have extensive interaction with the Pensacola Naval Complex.

The U.S. Coast Guard Station at Mobile, Alabama interacts with the U.S. Coast Guard Station at NAS Pensacola and Helicopter Combat Support Squadron 16 to provide Search and Rescue operations in the Gulf of Mexico. The Federal Aviation Administration at Pensacola Municipal Airport coordinates airspace utilization for commercial and general aviation operations with the Navy to assure safe and efficient flight operations in the Pensacola region. The National Weather Service, currently located within the Pensacola Naval Complex, will relocate to Pensacola Municipal Airport and continue to provide weather information from its new location.

The U.S. Department of Interior, National Park Service owns land within NAS Pensacola and accommodates public visitations to Fort Barrancas, Fort San Carlos and Fort Redoubt.

Natural Environment

Climate

The climate of the Pensacola region is characterized by warm summers, mild winters and abundant precipitation. Average summer temperature is slightly over 80 degrees Fahrenheit, average winter temperature is approximately 55 degrees and annual precipitation averages more than 61 inches. Maximum rainfall (average monthly total of 7.2 inches) normally occurs in July, while minimum rainfall (3.4 inches average) typically occurs in November. Low pressure areas are frequently generated over the Gulf of Mexico which often result in heavy precipitation and susceptibility to hurricanes. The normal duration for hurricane conditions is from 48 to 72 hours. The city of

Pensacola and the various facilities comprising the Naval Complex are protected from open water of the Gulf of Mexico by Santa Rosa Island and Perdido Key. Nevertheless, the entire area is subject to severe flooding from storm surges. On the average, a hurricane strikes the Florida Panhandle once every 17 years and fringe effects are experienced once every five years.

Geology

The Pensacola region is located in the Coastal Plain Province which consists of unconsolidated sands, silts and clays deposited during sea level fluctuations. This thick layering of material extends from the surface to a depth of as much as 1,000 feet. It is often referred to as the sand and gravel aquifer. In the southern part of Escambia County, this sand and gravel aquifer and the larger Florida aquifer are separated by a Miocene clay unit. Groundwater is thus retained in the upper limestone of the Florida aquifer. The tidal mud flats of the mainland, facing the bay, are being formed by the sediment accumulation process that has been occurring for thousands of years. The land forms of the coastal area consist of barrier islands, lagoons, estuaries, inlets and bars, coastal ridges and sand dunes with intervening swales parallel to the coast.

Seismology

While there are several faults in Escambia and Santa Rosa Counties, the probability of damage from an earthquake is extremely unlikely. While some shocks have been reported in Florida, most of these appear to be related to seismic events elsewhere in North America. A continuously operating seismograph has been functional in Florida only since October, 1977.

The U.S. Coast and Geodetic Survey ranks all areas of the United States in regard to the possibility of damage from earthquakes on a quantitative scale of 0 to 3. These rankings reflect potential intensity and anticipated damage, but not frequency. The Florida Panhandle western lowlands near Pensacola lie in Zone 2, where moderate damage is considered possible. This classification is assigned due to the mild tremor that was reported from Pensacola on February 6, 1780 and the severe earthquake reported from a nearby military installation on May 8, 1781. More recently, the only notable event was a mild tremor reported in 1952 at Quincy, 160 miles east of Pensacola.

Topography

Two major topographic divisions exist in the region: The Coastal Lowland and the Western Highlands. The Coastal Lowland is nearly level, poorly drained land extending about twelve miles inland from the coast. Ground elevations in the Pensacola region range from sea level to over 50 feet above mean sea level. The Western Highlands begin at the northern edge of the Coastal Lowland, are well drained, and have gentle to strong slopes rising 200 to 300 feet in Santa Rosa County and Escambia County.

The sites comprising this study are in the Coastal Lowlands with river basins dissecting the general area making the broad expanses of marshland significant for planning purposes.

Hydrology

The Pensacola region is located within the Perdido-Escambia River basin which drains directly into the Pensacola Bay estuary. The Escambia River, the largest stream in the area, flows southward from Alabama dividing Escambia County from Santa Rosa County and empties into Escambia Bay. Two other major streams, the Blackwater River and the Yellow River, also flow southward from Alabama to discharge into Blackwater and East Bays respectively. These major rivers are fed by a well developed system of tributaries. Springs give rise to numerous small streams.

The mean average discharge into the Pensacola Bay system of the three gauged streams noted above is approximately 9,800 cubic feet per second (cfs). After accounting for the flow from ungauged areas of the drainage basin, the estimated mean average daily discharge into the Bay from all sources is 12,400 cfs. Surface freshwater in regional streams and rivers is generally of good quality.

Wetlands and Flood Plains

Though wetlands occur throughout the region, the principal wetland areas are concentrated in the low lands along the Escambia and Perdido Rivers. Wetlands occur on portions of NAS Pensacola adjacent to Pensacola Bay and portions of properties surrounding OLF Bronson and OLF Choctaw. There are no wetland areas on Corry Station.

The Pensacola area has experienced flooding on various occasions as a result of hurricane storm activity. Major storms occurred in 1906, 1917 and 1926. High tides of 10.8 feet and 9.4 feet (National Geodetic Vertical Datum) were reported in Pensacola Bay in the storms of 1906 and 1926 respectively. Many structures in the area were flooded during these storms.

Normal high tide is approximately 1.6 feet National Geodetic Vertical Datum (NGVD). On the basis of studies by the Federal Emergency Management Agency under the National Flood Insurance Program, the 100 year stillwater flood elevation in the general vicinity of NAS Pensacola was determined to be 6.0 foot NGVD.

Forest and Vegetation

Upland natural vegetation communities in the Pensacola area can be divided into three broad categories: Mesic hardwoods, longleaf and slash pinelands and scrub. The mesic hardwood hammock is characterized by one or more species of trees, mostly deciduous hardwoods. The longleaf and slash pineland is characterized by dense, prairie-like understory of many flammable herbs and low shrubs. In mature stands, the overstory is scattered and less important ecologically than the ground cover. Following surface fires, which occur periodically, plants re-sprout from undamaged rootstocks which facilitates the regeneration of the forest by providing openings for longleaf and slash pine reproduction. The scrub plant community consists of dense growths of shrubs

and small trees which have broad, persistent leaves. An overstory of sand pine, slash pine, or longleaf pine may also be present. The "scrub floor" is generally dry, and even though fires occur periodically, the plant community re-establishes itself quickly. Urban and rural cultural activities throughout the study areas have altered natural vegetation by development, silviculture, agriculture, drainage, and fire control. Remnants of the natural vegetative community remain; however, its continuity has been disrupted by the establishment of managed, ecologically young forests such as slash pine and longleaf pine plantations.

Groundwater

Northwest Florida generally has groundwater of good quality and Escambia and Santa Rosa Counties have been described as having exceptionally good groundwater. This condition is attributed to the combination of high annual rainfall and the quartz sand and gravel substrata through which the rainfall percolates. The high rainfall provides ample recharge for the groundwater and surface water systems of the area.

Area groundwater is low in mineral content, usually has a hardness of less than 25 ppm, chloride between 3 and 15 ppm and a dissolved solids of 20 to 80 ppm. Overall, the hydrologic conditions of the Pensacola region are positive and offer no planning constraints. The total amount of fresh groundwater used for industrial purposes is 66.8 million gallons per day. Two million gallons are used for irrigation purposes and 4.5 million gallons are used for rural domestic purposes daily.

Endangered Species and Critical Habitat

The Pensacola region's climate and coastal environment provide conditions which support a wide range of wildlife. Accordingly, the region has significant acreage of major wildlife management and preservation areas. The Blackwater River State Forest and the Gulf Islands National Seashore are in the public domain whereas the St. Regis and La Floresta Perdido Wildlife Management areas are in the private domain. Shore birds, wading birds and seabirds are found in the Pensacola Bay areas as well as resident and migratory water fowl. Endangered species which have been sighted and are protected in the region are the red-cockaded woodpecker and the southern bald eagle.

Mammal habitats are present in the Pensacola region. The black bear, while not on the endangered list, does inhabit the area. The Perdido Key beach mouse is considered endangered by the United States Fish and Wildlife Service (USFWS). A critical beach mouse habitat has been identified in Escambia County within the primary dunes. Endangered amphibians and reptiles on the USFWS list which are likely to be found in the area include the green turtle, leatherback turtle, hawksbill turtle and Atlantic Ridley turtle. Other threatened and endangered animals likely to be found in the Pensacola region are identified in Table II-1. Though the basis for including these particular species on the list of threatened and endangered animals is based on a general survey of only NAS Pensacola and OLF Bronson, it is believed that the data

TABLE II-1

THREATENED AND ENDANGERED ANIMALS

Scientific Name	Common Name	Station Status	Status FGFWFC	Status USFWS	Habitat
FISHES					
Acipenser oxyrhynchus desotoi	Gulf sturgeon	M	SSC	UR2	Fresh, estuarine, marine (Gulf coast)
Fundalus jenkinsi	Salt marsh topminnow	P	SSC		Salt, fresh, brackish waters
AMPHIBIANS AND REPTILES					
Alligator mississippiensis	American alligator	R	SSC	T(S/A)	Swamps, marshes, ponds
Caretta caretta caretta	Loggerhead turtle	M	T	T	Marine, coastal
Chelonia mydas mydas	Green turtle	M	E	E	Marine, coastal
Dermochelys coriacea	Leatherback turtle	M	E	E	Marine, coastal
Drymarchon carais couperi	EAstern indigo snake	P	T	T	Open areas near water
Eretmochelys imbricata imbricata	Hawksbill turtle	M	E	E	Marine, coastal
Gopherus polyphemus	Gopher Tortoise	P	SSC	UR1	Sandy coastal plains
Lepidochelys kempi	Atlantic Ridley turtle	M	E	E	Marine, coastal
Rana areolata aesopus	Florida gopher frog	P	SSC	UR2	Sand hill communities
Macroclemys temmincki	Alligator snapping turtle	SR	SSC	UR2	Swamps, marshes, ponds
MAMMALS					
Peromyscus polionotus trissyllepsis	Perdido Key beach mouse	N/A	T	E	Beach dunes
Trichechus manatus latirostris	West Indian manatee	M	E	E	Atlantic and Gulf coasts
Ursus americanus floridanus	Florida black bear	N/A	T	UR2	Titi swamps
BIRDS					
Charadrius alexandrinus Tenuirostris	Southeastern Snowy plover	P	T	UR2	Open, dry, sandy beaches
Dendroida dominica stoddardi	Stoddard's yellow-throated warbler	P-U		UR2	Wooded habitats
Egretta thula	Snowy egret	P-U	SSC		Freshwater and coastal wetlands
Falco peregrinus tundrius	Arctic Peregrine falcon	M	E	T	Winters in coasts
Falco sparverius paulus	Southeastern kestrel	R	T	UR2	Open pine forests, clearings
Haematopus palliatus	American oystercatcher	P-U	SSC		Open coastal beaches
Haliaeetus leucocephalus	Bald eagle	M	T	E	Shores
Pandion haliaetus	Osprey	R			Near water
Pelecanus occidentalis carolinensis	Eastern brown pelican	R	SSC		Mangrove trees, coasts
INVERTEBRATES					
Copris gopheri	Copris tortoise commensal scarab beetle	U		UR2	Associated with gopher tortoise

TABLE II-1

THREATENED AND ENDANGERED ANIMALS
(continued)

E = Endangered
T = Threatened
SSC = Species of Special Concern
UR1 = Under review for federal listing, with substantial evidence in existence indicating at least some degree of biological vulnerability and/or threat
UR2 = Under review, but substantial evidence of biological vulnerability and/or threat is lacking

FGFWFC = Florida Game and Freshwater Fish Commission
USFWS = U.S. Fish and Wildlife Service

Station Status
R = Resident
M = Migrant
SR = Suspended Resident
P = Possible Resident, due to habitat availability; survey required
U = Unknown, survey required
N/A = Not expected to occur

Source: Fish and Wildlife Management Section Comprehensive Natural Resources Management Plan
Pensacola NAS, Florida (November 1988)
By: U.S. Fish and Wildlife Service, Panama City, Florida

reflects what is likely to be found throughout the Pensacola region where habitat exists to support species occurrence.

The white-top pitcherplant was observed in a 1986 biological survey at NAS Pensacola. It is considered endangered by the Florida Department of Agriculture (FDA). Other plants included on the FDA endangered species list are: Cruises' golden aster, trailing arbutus, panhandle lily, orange azalea, and red-flowered pitcherplant. Table II-2 provides a more complete list of threatened and endangered plants likely to occur in the region.

Shellfish of significance in the study area include bay scallops; white, pink, and brown shrimp; hard blue crab, and oysters. These shellfish are a significant element in the Pensacola Bay commercial fishery.

Coastal Ecology

Coastal marshes occur on low wave-energy shorelines in Florida and may also extend into tidal rivers. Tidal marsh vegetation consists of relatively few species representing little variation in life form. In contrast, the ecological conditions that control this vegetation are made complex from tidal influence.

Smooth cordgrass and needlerush are found in frequently inundated areas. Vegetation on beaches and foredunes are pioneer plants including sea oats. Salt spray tends to retard succession much as fire in other ecosystems and result in a grassy or shrubby stage. Grassbeds composed of rooted plants and attached algae below the water surface include many grass species inhabiting shallow waters from mean low tide to depths up to two meters.

Biological conditions in the various bays and estuaries enable an active sport and commercial fishing program. Oyster production has been erratic and degradation of water is considered a factor. Industrial pollutants and influxes of freshwater from flooding rivers are a negative influence.

Air Quality

Air quality in the Pensacola area is affected principally by industrial emissions, vehicle exhaust emissions and open burning. The Florida air quality monitoring network has 10 monitors in Escambia and Santa Rosa Counties measuring five major pollutants: Total suspended particulates, sulfur dioxide, nitrogen dioxide, carbon monoxide, and ozone.

Both counties are considered attainment areas for all five pollutants. It should be noted, however, that Escambia County is experiencing increases in sulfur dioxide concentrations. Analysis of 1985 data is currently underway to determine whether that condition is a meteorological anomaly or an increase due to emissions.

TABLE II-2

THREATENED AND ENDANGERED PLANTS

Scientific Name	Common Name	Station Status	Status FDA	Status USFWS	Habitat
Chrysopsis gossypina cruiseana	Cruise's golden-aster	N/A	E	UR1	Coastal dunes on Santa Rosa Island
Drosera intermedia	Water sundew	R	T		Aquatic, clear streams
Epigaea repens	Trailing arbutus	N/A	E		Dry, acid, sandy soil in open woods
Pinguicala Planifolia	Chapman's butterwort	R		C2	Low pinelands and wet Savannahs
Hexastylis arifolia	Heartleaf	N/A	T		Rich deciduous woods on ravine slopes
Kalmia latifolia	Mountain laurel	N/A	T		Rich, moist, shady woods
Lilium iridollae	Panhandle lily	N/A	E	UR2	Black, mucky soils
Polygonella macrophylla	Large-leaved jointweed	R	T	UR1	Sand pine-oak scrub ridges
Rhododendron austrinum	Orange azalea	N/A	E	UR5	Most, wooded ravines
Sarracenia leucophylla	White-top pitcherplant	R	E		Open acid bogs
Sarrancenia rubra	Red-flowered pitcherplant	N/A	E	UR5	Acid bogs, wet slash pine woodlands

E = Endangered
T = Threatened
SSC = Species of Special Concern
UR1 = Under review for federal listing, with substantial evidence in existence indicating at least some degree of biological vulnerability and/or threat
UR2 = Under review, but substantial evidence of biological vulnerability and/or threat is lacking
UR5 = Still formally under review for listing, but no longer considered for listing because it is more widespread or abundant than previously believed
C2 = Candidate for listing requiring additional study by USFWS

FDA = Florida Department of Agriculture
USFWS = U.S. Fish and Wildlife Service

Station Status
R = Resident
M = Migrant
SR = Suspended Resident
P = Possible Resident, due to habitat availability; survey required
U = Unknown, survey required
N/A = Not expected to occur

Source: Fish and Wildlife Management Section Comprehensive Natural Resources Management Plan
Pensacola NAS, Florida (November 1988)
By: U.S. Fish and Wildlife Service, Panama City, Florida

Noise

Noise is a form of air pollution of particular interest in a community having extensive aircraft operations. Noise is generally defined as unwanted sound. Accordingly, the determination of whether certain sounds are noisy is both relative and subjective. The setting in which a particular sound is heard can play a large part in its acceptability.

The environmental sound levels in the Pensacola area are directly related to the type, time of day and frequency of activity conducted at each facility which in turn results in a composite noise level which relates to the observed reaction of communities exposed to air operating.

NAS Pensacola is the only site of the four sites included in this study where the facility location, as well as the nature and frequency of aircraft operations in relation to the nearby development pattern, presents a significant planning consideration. Recent modifications to aircraft training operations at NAS Pensacola has reduced the noise impacts on residential neighborhoods to the north across Bayou Grande. Nevertheless, noise levels continue to be higher than desired for the major portion of the residential community lying between Bayou Grande and U.S. 98 as well as the Pleasant Grove Community to the west of NAS Pensacola. The problems of excessive noise resulting from aircraft operations is due to incompatible land use patterns which, for the most part have occurred after the initial establishment of NAS Pensacola.

In recognition of the need to prevent incompatible development of land adjacent to military air fields the Department of Defense has initiated the Air Installation Compatible Use Zones (AICUZ) program. The purpose of the AICUZ program is to protect the public's health, safety and welfare and to prevent civilian off-base land use encroachment from degrading the operational capability of military air installations. NAS Pensacola has a current AICUZ Addendum (see Appendix XI) which outlines operational policies for minimizing noise impacts on the surrounding civilian community. The AICUZ Addendum also identifies cooperative actions that are being pursued by the navy and local governments to provide the best possible protection for each agency.

Water Quality

Surface waters of the Pensacola Bay system and the adjacent Gulf of Mexico within the jurisdictorial boundaries of the State of Florida have been classified as either Class II Waters- Shellfish Propagation and Harvesting or as Class III Waters -Recreation, Propagation, and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife.

In the past, point and non-point source loadings from urban and industrial activities greatly impacted the Bay system. During the late 1960's and early 1970's, water quality problems were identified, studied and addressed. Water quality improvement was noticeable in the mid 1970's but limited water quality monitoring activities have occurred since that time. Escambia Bay had become a particularly acute problem due to its small capacity to assimilate oxygen-

demanding wastes. That inability is due to the layering of water in the bay, with little vertical mixing.

It is generally concluded, based on the limited sampling in recent years, that present water quality in the Pensacola Bay and other Bays is good. Some dissolved oxygen reduction noted in 1984 and again in 1986 is a condition which must continue to be monitored. Sediment quality within Pensacola Bay was sampled in 1986 and considered good.

Land Use

The Pensacola region has two contrasting land use areas. The northern two-thirds of Escambia and Santa Rosa Counties is almost exclusively rural. Forests, along with croplands and pasturelands, dominate the area. The southern one-third of these counties is populated at densities ranging from relatively high urban density within the city of Pensacola to low density at urban fringe locations. There is also a concentration of industrial, commercial and institutional uses generally fanning out from Pensacola Bay. Wetlands comprise approximately five percent of the area and are concentrated primarily along the Escambia and Perdido Rivers as well as along the perimeters of the bays. Overall development patterns follow transportation corridors. Industrial development is located generally where rail and maritime shipping access is available as well as at locations where the roadway system provides maximum transportation advantages.

Residential development tends to be along highway corridors and the internal areas adjacent thereto. The presence of extensive water frontage along bay shorelines has encouraged high quality residential development and higher densities, including high-rise condominiums. These phenomena reflect not only a strong market demand for waterfront sites, but also the higher land value of waterfront properties.

Commercial and industrial development is concentrated in downtown Pensacola, but strip commercial developments and outlying centers, generally at major highway intersections or in neighborhood service clusters, provide a dispersed pattern of retail and service commercial land uses. The most significant urban commercial concentration within the region outside Pensacola is in the city of Milton, where good highway access is provided by U.S. 90 and I-10.

Transportation

Roadways

The Pensacola region is served by four major highways providing access from the north, east and west. Interstate 10 is a transcontinental east-west highway stretching from Jacksonville to Los Angeles. It has a north-south spur, designated I-110, penetrating downtown Pensacola and providing a link with beach areas. Supplementing I-10 as an east-west highway is U.S. 90 (Old

Spanish Trail) running from St. Augustine to San Diego. U.S. 98 (Gulf Coast Service Highway) is another east-west artery starting at West Palm Beach and terminating at Natchez, Mississippi. U.S. 29 is a direct route to the Northeast, connecting with I-65 and terminating in Washington, D.C.

Several state highways constitute important elements of the area's overall traffic circulation system. These include SR 87, SR 292 (Gulf Beach Highway), SR 295 (Navy Boulevard/New Warrington Road), and SR 173 (Blue Angel Parkway).

Through a continuing transportation analysis and planning process, roadway improvements are made on a priority basis to assure safe and adequate service for local traffic as well as for traffic originating outside the Pensacola region. Due to rapid growth of the Pensacola area within the last ten years, certain arterial roadways are operating at a level beyond their design capacity, although the entire network is being upgraded with a wide range of improvements in accordance with the Pensacola Urbanized Area Transportation Improvement Plan.

Railways

The region is served by freight service only. Three rail lines serve the port and other customers within the region. These are: the Burlington Northern Railroad, the Seaboard System Railroad and the Louisville and Nashville Railroad. None of these rail lines have railroad tracks with direct access to U.S. Naval facilities.

Air

The Pensacola Regional Airport is a civilian all-weather airport and the only public airport facility conducting passenger service, air cargo and mail transport. Airlines serving the region are Continental, Delta, Northwest and Eastern. Commuter airlines serving the area are Piedmont and Skyway Commuter. Two private airports, Ferguson Airport and Coastal Airport, are located in Escambia County.

The Pensacola Regional Airport has two runways. One is 6,000 feet in length and the other has a length of 7,000 feet. The airport is located four miles east of downtown Pensacola.

Water

The Port of Pensacola is the primary port facility for the region. Three channels lead into the port. The entrance channel is 37 feet deep while both the bay channel and the inner channel are 33 feet deep. Commercial channel depths are maintained by the U.S. Army Corps of Engineers. The U.S. Navy funds the dredging of the Navy Channel and maintains a wider and deeper channel than is required for the commercial port.

With the replacement of the USS Lexington with a larger operational carrier at NAS Pensacola it will be necessary to deepen the existing channel alignments from the Gulf of Mexico into Pensacola Bay. The channel improvement (initiated in February 1989) will dredge and dispose of approximately thirteen million cubic yards of new work material.

Bus and Transit

The region is provided with inter-city bus service by Greyhound/Trailways, operating from a new facility on Diamond Daisy Road. The only local transit service is provided by Escambia Transit System (ETS). ETS operates equipment under a 1971 agreement with the city of Pensacola and Escambia County.

ETS is housed in a modern facility designed to meet the area's transit needs through the year 2000. The system includes a fleet of 27 buses, 18 of which are operated on the regular, fixed route service. The remaining coaches are available for back-up, charter and possible future service extension. Shelters are provided at major generators. Fourteen fixed routes in southern Escambia County and the city of Pensacola provide adequate service six days per week with reduced service on Saturday. Route 14 is designated for hourly service from NAS Pensacola to the Navy shopping mall, Naval Hospital, Warrington and downtown Pensacola. ETS routes serve NAS Pensacola and Whiting Field and charter service is provided under contract.

Traffic

Traffic conditions on the roadway system within the Pensacola region range from very good to poor depending upon the particular travel corridor. Factors influencing traffic conditions are related to population growth, which in turn leads to an increased number of vehicular trips and the capacity of a roadway network to accommodate the increased trips. The ability to upgrade the roadway network to meet trip demands is usually constrained by financial resources and land development patterns.

Between 1970 and 1981, the number of vehicular trips each day on the Pensacola Urban Area roadway network increased by an annual average rate of 3 percent. The 1982 Pensacola Urban Area Transportation Study estimates that the average annual growth rate will continue through the "design year" of 2005, however, projections indicate a lesser rate of annual growth in future years. It is estimated that the increase in trips will drop to an annual average of 2 percent through 2005.

The Metropolitan Planning Organization (MPO), the agency responsible for prioritizing the region's roadway improvements, undertakes network deficiency analyses as a basis for its annual program. Such analyses, conducted periodically, use computer models as a means of assigning trips to the various segments of the roadway network based on projected land use and population by census tracts. Various alternative combinations of improvements are developed to determine the most beneficial and affordable combination of

improvements. Funding for identified improvements is provided by federal, state and local governments. Such improvements may include non-capital intensive projects such as intersection improvements and signalization modifications. However, traffic conditions often may warrant major capital expenditures for such improvements as widening of roadways and construction of entirely new roadways.

Those segments of the Pensacola urban area roadway network which appear in recent deficiency analyses and are of particular relevance to the naval facilities covered by this study are as follows:

1. U.S. 98 extending westward from Navy Boulevard to Perdido Bay. This roadway is a major access corridor serving Corry Station and OLF Bronson.

2. Blue Angel Parkway from a point north of Gulf Beach Highway (SR 292) to Pine Forest Road (SR 297). This roadway provides access to the western portion of NAS Pensacola.

3. Gulf Beach Highway west of Blue Angel Parkway (SR 173) to SR 243.

4. SR 87 from I-10 on the north, through Eglin Air Force Base to its southern terminus. This roadway serves OLF Choctaw.

5. U.S. 98 (Bridge) from the south shore of Pensacola Bay to downtown Pensacola.

6. A segment of Navy Boulevard immediately north of its intersection with U.S. 98 at Corry Station.

Of the projects listed above, the only improvement project partially included within the state's current five year Transportation Improvement Program is U.S. 98. The proposed improvement includes the construction of a four-lane facility with bicycle and pedestrian paths from S.R. 292 to S.R. 173 (Blue Angel Parkway).

The primary local streets that most directly affect the flow of traffic to and from both NAS Pensacola and Corry Station are Navy Boulevard, New Warrington Road and U.S. Highway 98. Immediately north of the Samuel B. Lovelace Bridge, Navy Boulevard is a five-lane facility with an average daily traffic (ADT) volume of approximately 24,5000 vehicles. North of State Route 292, Navy Boulevard becomes a four-lane facility with an ADT of approximately 13,000 vehicles. New Warrington Road, in the vicinity of the Entrance Road to the east gate of Corry Station, is a four-lane facility with an ADT of 14,400. U.S. Highway 98, which forms the southern boundary of Corry Station, is a two-lane facility with an average daily traffic volume of 18,000.

The greatest traffic congestion occurs along Navy Boulevard and New Warrington Road during the morning and evening rush hours. Increased traffic capacity can only be obtained by providing additional traffic lanes or by

implementing non-structural traffic operation techniques at select locations or periods of the days. Constructing additional traffic lanes along Navy Boulevard would be very costly due to the limited amount of right-of-way available and the extent of commercial and residential development that already exists along both sides of the street. Traffic operation procedures that could be applied to further improve traffic flow during off-base peak periods include the prohibition of left turns at all cross-streets; designation of one-way (reversible) traffic lanes; and re-timing of existing traffic signals to favor the major flow of traffic.

Utilities

Water

Water is supplied to the Pensacola Region by several water companies. All water comes from groundwater wells and is free of harmful bacteria, but requires chlorine as a disinfectant and lime for stabilization. The largest supplier of water to the region is the Escambia County Utilities Authority (ECUA). Their service area includes the city of Pensacola and areas in Escambia County. ECUA has 32 wells and can produce 72 million gallons of water daily. During 1987 eight of the wells required the installation of granulated charcoal filters because of chemical contamination. With the addition of filter systems, the eight wells are back on line. The distribution system consists of 1100 miles of pipe ranging from two inches to sixteen inches in diameter. The average daily usage is 29 million gallons. ECUA is now operating under a Water Master Plan completed for the Authority in December 1987.

Sewage

Presently operating within the region are over 50 public and private wastewater treatment plants. Escambia Utilities Authority operates seven plants with a capacity of 24.8 million gallons per day (MGD). The largest plant is the main street plant in Pensacola with a capacity of 20 MGD. Several treatment plants are overloaded, and ECUA is under a consent order to expand one of the seven plants at this time. A Sewage Master Plan is being prepared by ECUA and predicts the need to add an additional seven to 10 MGD in capacity over the next 20 years. As part of ECUA's overall sewage master plan a new effluent disposal site is to be constructed at the southwest corner of Gulf Beach Highway and Blue Angel Parkway. Construction of this facility is expected to be completed in 1989. In addition, ECUA is still investigating potential sites in the southwest area of the city (i.e., west of NAS Pensacola) for the construction of a new sewage treatment plant.

Electricity

The Pensacola Region is supplied electricity by the Gulf Power Company and the Southern Company System. Only Gulf Power Company serves the NAS complex. Gulf Power operates a power generation plant on the Escambia River

in Escambia County. Generating facilities at this plant consist of coal units. Gulf Power has a "reserve margin" allowing it to continue normal operations under peak loads or emergency situations. The northern portions of Santa Rosa County are supplied by two cooperatives, one located in Milton and another located in Jay.

Gas

The city of Pensacola serves the city and its suburban areas with natural gas through approximately 1,000 miles of distribution mains. This gas is purchased for resale by the city from United Gas Pipeline Company at three city gate stations in the Pensacola area. The city uses approximately 4.5 billion cubic feet of gas each year for its 48,000 customers.

Socioeconomic Environment

Demographics

The city of Pensacola, with 23.13 square miles, is the largest urban center in the western sector of the Florida Panhandle and has an estimated population of 62,288 persons (April, 1988). This represents 22 percent of the total 1987 estimated population of Escambia County (278,419) which is the most recent figure available. The gross population density of Pensacola is 2,693 persons per square mile of land area, while the gross density in Escambia County, with 657 square miles, is 424 persons per square mile of land area. This gross density disparity is attributable to the extensive undeveloped northern portion of Escambia County. Indeed, it is estimated that more than three-fourths of the Pensacola area's population is located within five miles of the various bay waters.

Santa Rosa County has nearly twice the land area of Escambia County at 1,152 square miles; however, the county's 1987 estimated population of 66,221 is slightly more than one-fourth that of Escambia County. The 1987 gross population density for Santa Rosa County, accordingly, is much lower at 57 persons per square mile.

The estimated combined population for Escambia County (including the city of Pensacola) and Santa Rosa County for 1987 is 344,640. This represents an increase of 54,868 persons since the official 1980 U.S. Census of Population, which is the most recent accrual census available, for an average annual rate of increase of 2.4 percent. By the year 1990, total population of the two counties is estimated to reach 353,390 persons, for a total growth rate over the projected ten-year period of 22 percent. This rate of population growth is higher than the southeastern U.S. region and is indicative of the economic strength and liveability of the Pensacola region.

The Pensacola population age, race and sex composition has changed little in recent years. One noticeable change in these characteristics is a slight decrease in the percentage of non-whites in the total population. It is

estimated that this decrease is at an average annual rate of slightly over one percent per year. The percentage of school-aged children in the total population is declining even though the actual number in this group is increasing. Between 1970 and 1980, the entire age group of persons under 25 years of age decreased. This trend is projected to continue while the percentage of persons in the 26-64 year-old category will increase, in keeping with national and state trends.

The per capita income in the Pensacola area increased during the period from 1970 to 1980 at a rate higher than that of Florida as a whole. In Escambia County, incomes increased at an annual compounded rate of 9.1 percent. In Santa Rosa County, the annual compounded growth rate was 9.5 percent. For the state as a whole, the growth rate was 8.9 percent. The median per capita income of Escambia County more than doubled between 1970 and 1980 from $8,020 to $16,586. Santa Rosa County increased at an even faster rate from $7,707 to $16,774. For the state as a whole, per capita incomes during the ten-year period increased from $8,267 to $17,280. The Pensacola area's growth in per capita income at a rate in excess of 7 percent annually is healthy and closely resembles the pattern for the State of Florida (7.7 percent annual growth rate). More current information is not available, but straight-line projection of the annual seven percent growth rate would result in estimate for 1998 media per capita incomes of $28,499 for Escambia County and $28,821 for Santa Rosa County.

Housing

The Pensacola region offers a wide spectrum of housing types for its residents. From rural and low-density housing to modern subdivisions surrounding Pensacola to medium and high density apartments and condominiums, a full range of housing opportunities is available.

The 1980 U.S. Census report determined that the Pensacola region had 109,217 dwelling units, up 31,925 or 41.3 percent from 1970. Approximately 99 percent of the housing units were found to have year-round occupancy and only one percent of all units were lacking any normal plumbing facilities. The vacancy rate in 1980 was approximately 9.0 percent which is considered to be in the normal range. The West Florida Regional Planning Council (WFRPC) has estimated, in its January 1988 technical memorandum, "Transportation Statistical Data," that in 1985 there were 128,546 dwelling units in the Pensacola Urbanized Area. This area covers roughly the lower third of Escambia and Santa Rosa counties, but the large majority of dwelling units. Even though the 1980 and 1985 figures are not directly comparable, it is obvious that there has been a sharp increase in dwelling units in the Pensacola Region (more than 19,329).

The median dollar value of housing in the Pensacola region in 1980 was $34,100. This is the most recent housing value information available. It may be assumed that the median figure will have risen considerably by the 1990 Census, given national trends throughout the 1980's. The 1980 distribution between various housing value ranges was as follows:

Less than $20,000	20.0%
$20,000 - $29,999	21.0%
$30,000 - $39,999	20.2%
$40,000 - $59,000	22.3%
$60,000 - $99,000	13.3%
Over $100,000	3.3%

The total number of naval military family housing units in the region is approximately 1,400. With 13,300 military personnel assigned to the various naval installations, it is necessary that many such personnel purchase or rent private housing in the area.

All Navy personnel assigned to the Pensacola area facilities are required to report to the Housing Referral Services office located at NAS Pensacola. Upon reporting, personnel are provided with information on military and private housing. A Basic Allowance for Quarters (BAQ) and a Variable Housing Allowance (VHA) is provided which, together, are intended to reflect prevailing community housing costs. This includes housing and housing-related expenses, including utilities but not telephone service.

The Pensacola Board of Realtors multiple listing service carries an inventory of available private-market housing ranging between 5,000 and 6,000 dwelling units at a given time and the supply of housing is sufficient to meet the demand. Adequate home-finding institutions are available within the community.

Economics

The Pensacola region's economy is influenced by three major economic forces: government, industry and tourism. Government includes both civilian and military employees. Industry includes manufacturing, as well as agriculture and forest products. The West Florida Regional Planning Council estimated the 1987 total labor force for the bi-county area to be 155,788, approximately a 9.4 percent increase since 1985. In Escambia County, 7,012 (5.6 percent) of the labor force of 125,455 was unemployed, while 118,443 were employed. In Santa Rosa County, the labor force was estimated at 30,333. Approximately 1,784 persons (5.9 percent) were unemployed in 1987, while 28,549 were employed. In 1985, the Pensacola Office of Job Services of Florida estimated that 131,000 persons held non-farm jobs in the bi-county Pensacola Metropolitan Statistical Area, which is approximately 92 percent of the total labor force (142,391). That report concluded that the area's employment picture is fairly stable with some seasonal fluctuations, but the more recent estimates show that growth is occurring.

During the past ten years, manufacturing has declined in total jobs in line with a nationwide trend. In 1974, 14,600 such jobs existed in the area, but by 1984, the most recent year for which data was available, this number decreased by 2,200 jobs or 15 percent. Service businesses have been the area of greatest growth in employment between 1974 and 1984 with a gain of 14,100 jobs for a percentage increase in this economic sector of 103.7 percent. It now

constitutes nearly 25 percent of the area's non-agricultural jobs. An almost equal share of the total job base in the area is in retail trade and the 1974-84 growth for that sector was 45 percent.

The third largest employer in 1984 was government, with approximately 23 percent of all non-agricultural employment. This does not include active military personnel which, if included, would have increased the 1984 government work force to 34.7 percent of the total making it the largest single employment category. This sector of the employment base in the region grew at a slow rate when compared to the services and retail sector. Of the entire government employment, approximately 75 percent are Navy employees.

Tourism is directly related to the region's attractive recreational opportunities focused on the various water bodies and beaches. Restaurants, motels, and recreation-related businesses serving tourism employ many local people. Tourism has increased steadily in recent years at about 15 percent per year. It is estimated that in 1984, the most recent year for which reliable data is available, almost 3 million tourists visited the Pensacola region and added about $300 million to the local economy. Only the federal government has a greater impact on the Pensacola Metropolitan Statistical Area in terms of dollars coming into the local economy. It has been estimated that the combined annual economic impact of the military and civilian employment (including contractors) related to the Department of Defense operations is $641 million.

Public and Community Services

Educational facilities in the Pensacola region include a wide range of both public and private schools. Public schools are accredited and teachers are required to meet state certification requirements. There are 31 non-public schools in the region. The University of West Florida is located in Pensacola as a four-year university offering undergraduate and graduate degrees. It has an enrollment of approximately 6,300 students. Pensacola Junior College has three area campuses and had a 1985 enrollment of 20,406 students. Two private four-year colleges are located in the area, Liberty Bible College and Pensacola Christian College. George Stone Area Vocational Technical Center is fully accredited and rounds out the educational facilities to meet the wide range of educational needs. Total school enrollment in the Pensacola Urban Area was estimated by the WFRPC to be 74,373 in 1985 and is projected to grow to 90,755 by 1990.

Recreational opportunities provided by local, state, and federally-owned and operated facilities are abundant in the region. A complete range of facilities for all age groups and interests is provided by large outdoor recreational facilities including the Gulf Island National Seashore, other numerous active and passive sites along the coast, as well as within neighborhoods and large outlying sites used for nature study, hiking, camping, etc.

Fire, police and emergency medical services are readily available throughout the region either as a public service of local government or by volunteer

organizations. Mutual aid agreements help assure coordination of services between local governmental jurisdictions.

The bi-county Pensacola region falls into District 1 of the Florida Department of Health and Rehabilitative Services for administration of social services. Most programs are jointly funded by state and federal dollars. Many services are rendered free of charge. Other services are provided on the basis of ability to pay.

In patient health services for the general public are provided at six hospitals and a regional health care center serving cities and counties in West Florida and Alabama. Those include Baptist Hospital, Sacred Heart Hospital, Santa Rosa Hospital, Century Memorial Hospital, University Hospital, Gulf Breeze Hospital and West Florida Regional Medical Center. Nearly 1,600 beds are available in these facilities and a wide range of health care services are offered. The Naval Hospital, located at Corry Station, provides comprehensive in patient and out patient services to active duty and retired military personnel and dependents. A branch medical facility is located on NAS Pensacola and an annex is located at Saufley Field.

Cultural Resources

The Saenger Theater in the city of Pensacola has become a showcase for area performing arts. The Pensacola Symphony Orchestra presents its season from the Saenger stage. The Pensacola Civic Ballet also performs on the Saenger stage with symphony members. The Saenger has its own Season at the Saenger. These presentations include touring shows and popular and classical music attractions. Excellent classical and contemporary musical entertainment is offered through the University of West Florida's Music Hall Artist Series and the Lyceum Series at Pensacola Junior College. A variety of concerts are sponsored by Pensacola Community Concerts. Pensacola also supports a Little Theatre.

The Pensacola Civic Center is a multi-purpose entertainment and sports facility serving the region. It seats 10,000 persons and accommodates a variety of events from circuses to conventions.

A variety of visual arts are available for enjoyment in the community. The Pensacola Museum of Art, in addition to its private collection, provides the showcase for traveling loan exhibitions. Excellent contemporary art exhibits are scheduled each month at the Fine Arts Gallery at Pensacola Junior College and the Fine Arts Gallery at the University of West Florida. Several privately owned galleries also offer a variety of visual art entertainment.

The West Florida Museum and Pensacola Historical Museum offer representations of Pensacola's unique history.

Political Environment

Local Government

The units of local government which are considered to constitute the area of primary influence for the naval facilities covered by this study are the city of Pensacola, Escambia County and Santa Rosa County. The small cities of Milton, Gulf Breeze and Century are located within the urban area but are not discussed separately from the counties in which they are located.

The city of Pensacola is located within Escambia County. It has a council-manager form of government with ten council members elected for two-year terms. The city manager is appointed by the council and the mayor is elected by the council. Both Escambia County and Santa Rosa County have governing bodies consisting of five-member Boards of Commissioners elected for terms of four years. The Commissioners have no authority over other elected officials such as property appraiser, tax collector, sheriff, etc., except in certain financial areas. A county administrator is appointed by each of the County Commissions and charged with the day-to-day administrative management of each county.

City of Pensacola residents constitute 18 percent of the bi-county area population. Many more persons live in suburban areas immediately adjacent to the city and the economic, social and governmental interdependence between both counties and the city of Pensacola is evident in many ways. State and federal agencies serving the region are located in the city, and its medical facilities and other institutions serve clients from the surrounding counties. In 1980, the most recent year for which information is available, the U.S. Census of Population determined that of all workers 16 years of age and older residing in Escambia County, 38.4 percent worked within the city of Pensacola and 53.8 percent worked within the county, but outside the city. A total of 3.2 percent worked in Santa Rosa County and 4.6 percent worked in other jurisdictions.

Intergovernmental Coordination

SECNAVINST 11010.10A provides guidance on intergovernmental coordination. Executive Order 12372 sets forth procedures under which Federal agencies and applicants for Federal assistance must give State and local governments, through State and areawide clearing houses, an opportunity to assess the relationship of their proposal to State, areawide and local plans and programs. In short, Executive Order 12372 is designed to provide State, City, County elected officials and others, through a central state clearing house, an opportunity to review and provide comments on federal decisions on proposed projects that may affect their own plans and programs. However, clearing house recommendations on federal or federally-assisted development proposals are advisory only.

A "clearing house" is a comprehensive planning agency composed of representatives of the state or local government. It acts as the coordinating office for processing review of federal plans and programs. If a state desires

a Memorandums of Understanding (MOU) is established with DOD to open up avenues for exchange of information related to their mutual interests. Exchange of information need not await an MOU and can take place at anytime. The state clearing house for the Pensacola region is the Florida State Planning and Development Clearing House located in Tallahassee. Coordination of plans and projects having impact on the local area are provided by Southern Division, Naval Facilities Engineering Command, Charleston, South Carolina.

Environmental Management Jurisdictions

Environmental management is a responsibility of all levels of government. The federal government's responsibility stems from the National Environmental Protection Act (NEPA), which required the preparation of environmental impact statements on proposals requiring legislation funding and other federal actions. Environmental compatibility requirements are established by various departments and agencies comprising the Council on Environmental Quality (CEQ). The construction of federally supported projects at the local level must be found compatible after investigating all possible impacts in a systematic interdisciplinary study process. Master plans for governmental facilities must address environmental planning considerations.

Other statutes enacted by the U.S. Congress which establish federal agency roles and responsibilities in environmental management are as follows:

Clean Water Act: This act, as amended, regulates discharges to the waters in which there is a public interest.

Rivers and Harbors Act of 1899: This act prohibits the unauthorized obstruction or alteration of any navigable water unless authorized by permit.

Clean Air Act: The Clean Air Act, as amended, provides for protection and enhancement of air resources.

Fish and Wildlife Coordination Act: This act requires that federal agencies consult with U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and state agencies before construction activities are undertaken to assure that wildlife conservation receives consideration in the early planning stage of a project.

Endangered Species Act: The Endangered Species Act of 1973, as amended, has the same agency clearance requirements and assessment process as the Fish and Wildlife Conservation Act.

Coastal Zone Management: The Coastal Zone Management Act of 1972, as amended, provides for the preservation, protection, development and, where feasible, restoration and enhancement of all coastal resources.

Coastal Barrier Resources Act of 1982: This act stipulates that no federal expenditures or financial assistance may be made available for various

construction projects within the boundaries of the Coastal Barrier Resources System.

Executive Order 11990, Protection of Wetlands: Requires agencies to take action to minimize destruction, loss, or degradation of wetlands.

Noise Control Act of 1972: Facilities operated for training in aircraft operations often have a unique problem of noise which has a direct impact on the surrounding urbanized area. Numerous studies have been conducted to document and control harmful effects of noise on humans largely in response to the growing problem of jet noise. In recognition of the problems identified through research, the U.S. Congress enacted the Noise Control Act of 1972 and the Occupational Health and Safety Act of 1970. These statutes have prompted numerous state and local governments to develop noise control measures.

The Department of Defense responded to the federal requirements by undertaking technical studies related to urbanization and encroachment on military air installations. The result was the Air Installation Compatible Use Zone (AICUZ) program. Noise levels are surveyed, an analysis of accident history is undertaken and existing population, land use and physical conditions are determined. After impacts and conflicts are determined, strategies are developed to alleviate problems to the maximum extent possible. Local governmental assistance through land use control, height and bulk limitation, as well as building code amendments may be indicated to mitigate adverse conditions.

Resource Conservation and Recovery Act of 1976 (RCRA): Public Law 94-580 provides technical and financial assistance for the development of management plans and facilities for the recovery of energy and other resources from discarded materials, and regulates the management of hazardous waste.

Toxic Substance Control Act of 1976 (TOSCA): Public law 94-469 requires testing and use restrictions on certain chemical substances to protect the environment and human health.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA): Public Law 96-510 provides for liability, compensation, clean-up and emergency response for hazardous substances released into the environment and for the clean-up of inactive hazardous waste disposal sites. This act establishes the so-called Superfund.

Superfund Amendments and Reauthorization Act of 1986 (SARA): Public Law 99-499 extends and amends CERCLA regarding response and liability, emergency planning, and establishment of a radon gas and indoor air quality research program.

In addition to the above, flood plain management, marine protection and prime farmland protection are the subjects of various laws and executive orders.

State of Florida Activities and Interests: Environmental protection and management legislation has been enacted in Florida over a period of years which applies to the coastal zone and to land and water management generally. This legislation is contained in various Florida Statutes and assigns responsibilities to state agencies, Regional Planning Councils and local governments to carry out a comprehensive program of coastal zone and resource management. Chapter 380 F.S. entitled the Florida Environmental Land and Water Management Act of 1972 was a response to NEPA and provided state-level environmental protection legislation. Under the broad heading of growth management, the State of Florida adopted in 1985 Chapter 187 F.S. entitled State Comprehensive Plan, which serves as the basis for the State Agency Functional Plans, as well as strengthened Comprehensive Regional Policy Plans and Local Comprehensive Plans with regard to environmental protection and resource conservation. Amendments to Chapters 161, 163 and 380, F.S. were enacted by the Florida Legislature in 1986 to further the State's objectives in these matters.

Three resource management projects have been initiated in the West Florida region. The first is the Bay Area Resource Inventory Program (BARIP), which is designed to gather water quality information and study the hydrodynamics of Pensacola area bays to identify the sources of existing stress on these water bodies. An analysis will be made to determine the carrying capacity of the bay system future development in Escambia and Santa Rosa Counties. Secondly, a regional utility authority serving primarily Okaloosa and Walton Counties is being organized, with some participation by Santa Rosa County. This program is expected to lead to improvement in the water supply and development of plans for improved wastewater treatment, as well as solid waste management.

Finally, a maintenance dredging study project in Escambia and Santa Rosa Counties is also underway to determine the effects of such dredging on the environment and locate appropriate spoil disposal sites.

Planning and Land Use

Both Escambia County and Santa Rosa County, as well as the city of Pensacola, have adopted comprehensive plans. Under the new state growth management legislation, however, all of these jurisdictions must prepare new comprehensive plans which conform to the expanded state requirements. The local plans must conform to the Comprehensive Regional Policy Plan (CRPP) which was prepared by the West Florida Regional Planning Council in November, 1986 and currently is under review by the Florida Department of Community Affairs. If approved by that state agency, the goals, policies, and standards set forth in the CRPP will become effective and provide a policy framework for all local comprehensive plans within the region. The subjects required to be addressed in the new local comprehensive plans include land use, traffic circulation, housing, infrastructure, coastal management, resource conservation, intergovernmental coordination and other concerns related to urban growth.

Failure to prepare comprehensive plans in accordance with state requirements may result in withholding of state aid for certain activities. Comprehensive land development codes are required to be adopted by localities following approval of comprehensive plans. Such codes would include the full range of land use controls, such as zoning, platting requirements, design standards, dedication and impact fee provisions and other means of assuring orderly plan implementation.

Land Use Control The city of Pensacola, through its Department of Community Design and Planning, is responsible for a comprehensive planning program. The city has zoning, building and other local development codes.

Santa Rosa County has zoning and subdivision (platting) regulations. Escambia County has subdivision regulations and most other codes in place, but it does not have county-wide zoning. Currently Escambia County has only adopted zoning regulations for the unincorporated area of the county that lies south of 10 Mile Road. This includes all areas adjacent to both NAS Pensacola and OLF Bronson. These recently adopted zoning regulations embrace generally-accepted zoning practices, repeal present limited zoning regulations, set forth appeal procedures and give special consideration to construction in marine, estuarine and riverine systems.

In addition to these more general county-wide land use regulations, Escambia County has recently adopted a special Airport Land Use Ordinance. It repeals a much less comprehensive ordinance (Ord. 86-20) and applies to lands surrounding all airport facilities in the county including:

- Pensacola Regional Airport (unincorporated area)
- Ferguson Airport (private)
- Coastal Airport (private)
- NAS Pensacola
- OLF Saufley Field
- OLF Bronson
- OLF Site 6
- OLF Site 8
- Naval Hospital (Corry Station)

The airport land use ordinance resulted from a growing community awareness that increasing urbanization within the Pensacola region, particularly in the immediate environs of airports and aircraft operation training sites, was leading to serious land use conflicts, which in turn tended to create undesirable environmental and public safety conditions.

The airport land use ordinance represents an overlay of proposed zoning regulations that apply to areas of influence described in the ordinance for each airport and training facility. In general principal, as the noise and accident potential varies from zone to zone around airport facilities, the restrictions on the type, density and occupancy of structures also vary. Land use, structure height, activity characteristics, lighting and other features

within clear zones, accident potential zones and noise zones are controlled under the special ordinance.

Santa Rosa County adopted an Airport Land Use Ordinance in 1986 which is similar to the ordinance recently adopted by Escambia County. Both ordinances are modeled after commonly-accepted practices used for local governments to protect the public health, safety and welfare in areas experiencing the unique influences associated with aircraft operations. The city of Pensacola has special controls applicable to airports and these are embodied in Airport Impact District Regulations.

Given the state-mandated requirement for more sophisticated planning by local governments in the interest of effective urban growth management, it can be expected that regulation of lands surrounding airports in Pensacola, Escambia County and Santa Rosa County will be a continuing requirement as a condition of state approval of comprehensive plans for these local governments.

Transportation Planning Transportation planning is a more complex and systematic activity within metropolitan regions of Florida than are most other components of a comprehensive plan. Within urbanized areas Metropolitan Planning Organizations (MPO) have primary responsibility for determining transportation needs and conducting an Urban Area Transportation Study. Elected officials representing Escambia County, Santa Rosa County; the cities of Pensacola, Gulf Breeze and Milton; and technical personnel representing the Florida Department of Transportation comprise the Pensacola Urban Area MPO. A Citizens Advisory Committee has been created to advise the MPO and technical personnel of various state and local agencies serve as a Technical Coordinating Committee also advising the MPO. The five major goals incorporated within the 1988 Pensacola Urban Area Transportation Study (PUATS) update (latest available) are as follows:

- To reduce transportation-related energy consumption
- To provide a safe, economic and efficient transportation system
- Recognition of environmental, social, economic and aesthetic impacts
- Optimization of Transportation System Management techniques
- To provide a coordination transportation system through a cooperative, continuing and comprehensive process.

Historic Preservation The Historic Pensacola Preservation Board was established for the purposes of protecting and enhancing noteworthy architectural and historic features of the community and providing advice and technical guidance for preservation activities. As an indication of the Board's effective role in the community, the thirty-six block Seville Square Historic District was created with special regulations applicable to properties within the district. The success of the district has encouraged residents of older neighborhoods to establish other historic and architectural preservation districts including the North Hill Preservation District and the Palafox Place Historic and Business District.

There are a total of five historic districts in the Pensacola region, including two within NAS Pensacola, which are included on the National Register of Historic Places. There are an additional 23 historic sites of local significance located in Escambia County and three in Santa Rosa County.

Numerous organizations have been identified by the West Florida Regional Planning Council whose purpose is to further the cultural and historic resources of the region. In addition to the Historic Pensacola Preservation Board are the Arts Council of Northwest Florida and the Bay Arts and Humanities Council.

Community and Naval Mutual Interests Though federal agencies are not necessarily required to comply with all local or state codes, they are required to conform with local and state environmental regulations. Nevertheless, the development of federal facilities such as the Pensacola Naval Complex frequently occur in urban areas where all non-federal lands are subject to local and state regulations and policies. These are promulgated by various governmental entities and administered under appropriate statutory authority. It is generally true that the economic, physical and social interrelationship that usually exists between a major federal installation and the surrounding community is mutually beneficial if means are clearly established for cooperation, communication and joint planning.

Recent growth management legislation enacted by the Florida Legislature and requiring coordinated planning at state, regional and local levels is indicative of the strong desire to achieve for the State of Florida more orderly urban growth and more effective use of planning and regulatory processes. It is explicitly stated in the State Comprehensive Plan that Florida intends to pursue with diligence a desirable quality of life, maximum economic opportunities and a sense of fiscal responsibility in accommodating future growth.

It is obvious from a review of the proposed Comprehensive Regional Policy Plan prepared by the West Florida Regional Planning Council that the Pensacola area will be expected to join in regional and statewide efforts. The Pensacola area local governments cannot be successful in this regard without the support and assistance of the numerous components comprising the Naval Complex. By the same token, the Complex cannot look forward to harmonious and timely accomplishment of its goals without a supportive attitude by the local governmental jurisdictions and the vast majority of Pensacola area residents whose lives and properties are affected daily by the presence of a major Department of Defense installation.

Not surprisingly, there are two strongly held concerns in the Pensacola urban area that deserve immediate attention: (1) public perceptions of increasing difficulties in maintaining a reasonably safe, healthful and aesthetically pleasing living environment as further development and population growth occur in the bi-county area; and (2) that the Naval Complex and its various component agencies and operations are able to continue functioning as required to meet their various mission goals and to adapt to ever-changing training

requirements and defense program technology. The noted concerns are exacerbated by existing facility locations that have been in place for some time with major investments made and which cannot be materially altered or relocated without careful consideration of many factors. This is not to say that all Pensacola Naval Complex facilities are in a similar status with respect to their current and future potential. It is a general characterization of a situation occurring frequently when major investments in physical facilities are made under one set of circumstances and when those circumstances (i.e. surrounding development patterns) change, various problems of adaptability may occur. A thorough review through a master planning process is an appropriate means of identifying strategies to solve or minimize such problems. The undertaking of comprehensive planning programs presently by the area's local governments and concurrent, ongoing planning for Naval Complex facilities is a rare opportunity for cooperative planning and will benefit both the community and the Complex.

Encroachment of private development into critical areas of operations at certain facilities is an issue of mutual concern for the community and the Naval Complex. Problems will become more acute as further community development is permitted to occur without zoning and special airport land use controls.

Navy Functions within the Pensacola Complex

Training

Training activities within the Pensacola Naval Complex are diverse and require a varied set of facilities to perform their assigned missions. These range from conventional classrooms to specialized facilities and simulators to outdoor training course such as obstacle courses, drill fields and firing ranges.

The Naval Aviation Schools Command (NASC) provides preflight training to student officers, officer candidates and aircrew candidates. NASC also provides specialized indoctrination programs for Midshipmen, Chief Warrant Officers, Limited Duty Officers, Naval Flight Surgeons and future Aviation officers.

Training Air Wing 6, through Training Squadrons VT4, VT10 and VT86, provides basic and advanced naval aviator flight training and basic, intermediate and advanced naval flight officer training.

Helicopter Combat Support Squadron 16 (HC-16) is the Navy's only Fleet Readiness Squadron using the UH-1N helicopter. As such, HC-16 trains pilots, aircrew and maintenance personnel in the skills required for their Search and Rescue mission.

The Naval Aerospace Medical Institute conducts training programs for Naval Flight Surgeons, Aerospace Physiologists, Aerospace Experimental Psychologists,

Aviation Medical Officers, Aerospace Medicine Technicians and Aviation Physiology Technicians.

The Naval Technical Training Center (NTTC), through its Cryptologic Department, provides entry-level training in five of the six branches of the Cryptologic Technician rating. The Fleet Advanced Cryptologic Training Division of the Cryptologic Department trains operators and maintenance personnel in direction finding and communication techniques for shipboard application. Functioning as Executive Agent for the National Security Agency, the NTTC Cryptologic Department conducts basic and advanced non-Morse training for all branches of the Armed Services. The Cryptologic Department provides Naval Security Group Reserve training for reserve officers and enlisted personnel.

The Naval School of Photography, under the command of the Naval Technical Training Center, provides basic and advanced instruction in all facets of photography.

The Consolidated Navy Electronic Warfare School at NTTC conducts aviation, surface and subsurface Electronic Warfare training relating to equipment operation, equipment maintenance, electronic warfare tactics and doctrine.

Air Operations

Air operations in the Pensacola Naval Complex involve all four of the land areas that comprise the complex. Forrest Sherman Field at NAS Pensacola is the largest and most active field in the complex. The radar air traffic control center, organizational and intermediate maintenance facilities, passenger and cargo terminals, refueling facilities and flight weather services are all located within Sherman Field. Training Air Wing 6, HC-16 and the Navy Flight Demonstration Squadron operate out of Sherman Field. Fixed and rotary wing aircraft destined for the Naval Aviation Depot arrive and depart from this field. Sherman Field will house the Fleet Air Control and Survey Facility which will provide air traffic control services for fleet flight operations over the Gulf of Mexico.

Chevalier Field, located on the east side of NAS Pensacola, serves the Naval Aviation Depot. Rotary wing aircraft arrive and depart from Chevalier Field during daytime hours.

A helicopter landing pad serving the Naval Hospital is located within the Naval Technical Training Center compound at Corry Station.

The Pensacola Naval Complex includes two outlying fields used to support air operations. OLF Choctaw provides support for fixed wing flight operations, particularly carrier landing qualification exercises. OLF Bronson is used by HC-16 for rotary wing training flights.

Waterfront Operations

Under the Gulf Coast Strategic Homeporting Plan, NAS Pensacola has been designated as the homeport of the aircraft carrier USS Kitty Hawk. The Kitty Hawk is scheduled to arrive in March 1991. In the meantime, the USS Lexington will continue to operate out of NAS Pensacola until sometime in 1990. As the host of the Naval Supply Center, NAS Pensacola will provide logistical support to numerous fleet vessels, as well as to the aircraft carrier. As a designated Defense Fuel Stockpoint, the Naval Supply Center receives bulk petroleum from barges offloading at fueling piers. A number of small craft are utilized for support of training functions, particularly parasail training operations. Small craft also perform security and pollution control functions. A Reserve Patrol Vessel/Minesweeper and Helo Landing Trainer are also stationed at NAS Pensacola.

Administrative

Although most functions have an administrative component of one size or another, administrative functions are those which are primarily or exclusively administrative in nature. The Pensacola Naval Complex includes several activities which are considered to be administrative functions.

The headquarters of the Naval Education and Training Command is located at NAS Pensacola. The Chief of Naval Education and Training (CNET) is the senior naval officer in the Pensacola Area and oversees a staff of approximately 45,000 military and civilian personnel who conduct education and training programs from coast to coast and to fleet vessels around the globe.

As the host activity to numerous tenant commands and supported units, NAS Pensacola has a large and diverse administrative staff that provides general administrative support. Likewise, the Naval Technical Training Center provides administrative support to the training activities at Corry Station.

The Navy Regional Data Automation Center provides data processing support to approximately 75 activities. The Personnel Support Activity maintains personnel service and pay records for all activities within the Pensacola Naval Complex and some outlying activities. The Naval Education and Training Program Management Support Activity provides employment services to all activities within the Pensacola Naval Complex through the Consolidated Civilian Personnel office. It also provides payroll processing and other accounting services to various activities at NAS Pensacola.

The Pensacola Naval Complex includes regional offices for two components of the Navy Resale Activity. These are the Navy Exchange and the Commissary Store.

Maintenance and Production Facilities

The Naval Aviation Depot (NADEP) is the largest activity within the Pensacola Naval Complex in terms of personnel and facilities. In addition to standard

depot-level maintenance for fixed and rotary wing aircraft, NADEP has the capability to perform modification, conversion, and crash and minor damage repair. NADEP also has an extensive component rework program with parts and assemblies manufacturing capability. The activity provides engineering and technical services in support of assigned aircraft and components.

Organizational and intermediate level maintenance is performed on station aircraft at Sherman Field. The NAS Pensacola Aircraft Intermediate Maintenance Department provides intermediate-level maintenance to VT-4, VT-10, VT-86, HC-16, Navy Flight Demonstration Squadron and Navy Recruiting Command Aviation Quality Assurance Team. Organizational maintenance is performed by the respective activities or by private contract.

Research, Development and Test Facilities

The Naval Aerospace Medical Research Laboratory conducts research into the various disciplines of aerospace medicine. The activity's mission requires extensive laboratory space as well as several specialized research facilities. Since some research involves primates, facilities to house the primate colony are required.

Supply and Storage Facilities

The Pensacola Naval Complex includes the Naval Supply Center (NSC), Pensacola which is the largest naval supply operation on the Gulf Coast. The Naval Supply Center, Pensacola provides logistic support to units of the Naval Education and Training Command, Naval Air Training Command, Naval Aviation Depot, various fleet units, and a variety of other tenant activities within the Pensacola Naval Complex and beyond. The Naval Supply Center, Pensacola utilizes over one million square feet of building space in performance of its mission. As a designated Defense Fuel Support Point (DFSP), the Naval Supply Center, Pensacola provides fueling services to aircraft and fleet vessels and maintains a bulk petroleum capacity of 164,000 barrels. It provides air cargo services for the Pensacola Complex at Forrest Sherman Field. Personal property services for personnel transferring into or out of the Pensacola Naval Complex also are provided by NSC.

The Supply Department of NAS Pensacola is located at Sherman Field. It provides logistic support to the intermediate and organizational-level maintenance operations at Sherman Field, administers contracts for refueling services at Sherman Field and at OLF Choctaw, and administers several dining facilities at NAS Pensacola.

The Pensacola Naval Complex also includes distribution centers for the Navy Exchange and Commissary Store Region. These distribution centers serve Exchanges and Commissary facilities located throughout the Gulf Coast. The relocation of these distribution centers from NAS Pensacola to Corry Station is planned.

Explosive Storage and Weapons Handling

The Weapons Division of the Air Operations Department at NAS Pensacola administers explosive storage and weapons handling operations for the Pensacola Naval Complex. Weapons handling operations include small arms handling related to training functions, aircraft weapon systems handling related to scheduled maintenance at the Naval Aviation Depot, and explosives/weapons handling related to logistic support of fleet vessels and aircraft through the Quicktrans air cargo operation.

Hospital, Medical and Dental Facilities

The Naval Hospital, Pensacola provides inpatient and outpatient services to active duty and retired military personnel and dependents in northwest Florida, southern Alabama and Mississippi. The Naval Hospital, Pensacola is responsible for provision of medical care at a branch hospital and eight branch clinics located in northwest Florida and Mississippi. Two of these branch clinics are located within the Pensacola Naval Complex at the Naval Technical Training Center and the Naval Air Station, Pensacola.

The Naval Dental Clinic, Pensacola serves as immediate superior in command to thirteen branch dental clinics located throughout Florida, Georgia, Louisiana, Mississippi, Tennessee and Texas. Within the Pensacola Naval Complex there are two central clinics, one at NAS Pensacola and the other at NTTC Corry Station.

The Naval Aerospace Medical Institute (NAMI) at NAS Pensacola conducts physical examinations for active duty and student aviators and functions as the convening authority for the Special Board of Flight Surgeons which makes recommendations regarding an individual's physical qualifications for continued flight status to the Naval Medical Command. NAMI is the central repository for medical data regarding the physical and mental attributes of Navy and Marine Corps aviators.

NAMI conducts training programs that lead to designation of Naval Flight Surgeons, Aerospace Physiologists, Aerospace Experimental Psychologists, Aerospace Medical Technicians, Aviation Physiology Technicians, and Aviation Medical Officers. Additionally, NAMI offers a three-year residency in aerospace medicine.

The NAMI Aviation Physiology Department provides flight and aircrew students with the required physiology training that includes night vision training, altitude training and emergency escape procedures. These training activities utilize hyperbaric and hypobaric chambers and a Multistation Spacial Disorientation Device.

The Naval Aerospace Medical Research Laboratory at NAS Pensacola conducts research, development, test and evaluation in aviation medicine and allied sciences in order to enhance the health, safety and readiness of Navy and

Marine Corps personnel in the effective performance of peacetime and contingency missions.

Public Works

The Navy Public Works Center (NPWC), Pensacola is responsible for providing public works support to the activities that comprise the Pensacola Naval Complex. The services provided by NPWC include provision, operation inspection and maintenance of public works, public utilities and transportation equipment; provision and management engineering and shore facilities planning services; and administration and maintenance of Navy family housing.

Community Support

Community support within the Pensacola Naval complex is comprised of a diverse set of functions and services provided by numerous activities. The Navy Resale Activity operates regional administration and distribution centers for both the Navy Exchange and Commissary Store within the Pensacola Naval Complex.

Support services also are provided by the Family Services Center, Navy Relief and American Red Cross. The Personal Property office of the Naval Supply Center assists active duty personnel and their dependents with moving and storage of personal property. Counseling services are provided by Navy Alcohol and Drug Safety Action Program and the Counseling and Assistance Center.

The Pensacola Naval Complex provides Command Religious Programs which support the spiritual, religious, moral and ethical welfare of members and other authorized personnel. The Religious Ministry Facilities (RMFs) are suitably configured for ministry to a diverse, multi-faith, inter-generational sea service populace and includes Chapels, Religious Education Buildings and other facilities or spaces devoted to worship services, religious education, pastoral counseling, fellowship activities and pastoral administration.

The Naval Legal Service Office provides legal assistance to active duty military personnel and their dependents. The U.S. Postal Service operates post offices at NAS Pensacola and NTTC, Corry Station. Financial services are provided by First Navy Bank, Pen-Air Federal Credit Union and Navy Federal Credit Union.

The Navy Campus for Achievement provides educational counseling and coordinates supplemental educational opportunities for active duty personnel at Pensacola area institutions. The Command Religious Program supports the community with worship services and religious education programs.

Entertainment services are provided for active duty and retired officers, Chief Petty Officers and Enlisted personnel and their dependents at their respective open messes.

Recreation

Recreational amenities within the Pensacola Naval Complex are extensive. The Recreation Department at NAS Pensacola manages recreational programs and facilities serving active duty and retired military personnel and their dependents. Outdoor activities are managed in conjunction with the Outdoor Recreation section of the Natural Resources Management Plan. Recreational amenities serving personnel at NTTC Corry Station are administered by the Recreation Department of that Command. A portion of OLF Bronson is being developed as a Navy Recreational Facility by the NTTC Recreation Department.

Bachelor Housing

The Navy provides bachelor housing for officers and enlisted personnel at NAS Pensacola, NTTC Corry Station and the Naval Hospital compound.

Family Housing

The Navy Public Works Center manages the family housing program for the Pensacola Naval Complex. The Family Housing Division of NPWC provides housing referral services to all incoming personnel. There are Navy-owned family housing units at NAS Pensacola and Corry Station. The Navy also owns Lexington Terrace, a 198-unit project located within the Pensacola area, approximately five miles from NAS Pensacola.

Cultural Resources

A number of cultural resources are found at NAS Pensacola. Historic Fort Barrancas and Fort Redoubt are a part of Gulf Island National Seashore managed by the Department of Interior. The National Seashore is within the boundaries of NAS Pensacola. The Pensacola Lighthouse and Keepers Quarters also are listed on the National Register of Historic Places. The Pensacola Naval Air Station Historic District, designated as a Landmark Historic District in 1974, contains 49 buildings or structures listed on the National Register. These historical resources and the Naval Museum attract numerous visitors to NAS Pensacola every year.

Impact and Interface with Associated Missions

Gulf Coast Homeporting Plan

The Gulf Coast Strategic Homeporting Plan will assign an operational aircraft carrier, the USS Kitty Hawk, to NAS Pensacola and transfer a training aircraft carrier, the USS Lexington, to Ingleside, Texas. The operational carrier with its larger complement and crew will impact the Naval Air Station in a number of ways.

The larger crew of the Kitty Hawk will require housing, utilities, community support facilities and recreational facilities. The Naval Supply Center,

Pensacola will experience a major impact on its operations as a result of its mission to provide logistical support not only to the Kitty Hawk but to many of the other fleet vessels assigned to other Gulf Coast ports as a part of the Strategic Homeporting Plan.

Air traffic at Forrest Sherman Field is expected to increase as a result of the arrival of the operational carrier at NAS Pensacola. The impacts are discussed in more detail in the following paragraph about the Naval Aviation Training System Plan.

Naval Aviation Training System Plan

The anticipated increase in air traffic at Forrest Sherman Field may conflict with touch and go/emergency landing practice and field carrier landing practice operations. This conflict may force some or all of the touch and go/emergency landing practice and field carrier landing practice operations to OLF Choctaw. This shift in flight operations will impact the capacity of OLF Choctaw. This field is utilized jointly by COMTRAWING FIVE and COMTRAWING SIX for training flight operations. When in use by COMTRAWING SIX for field carrier landing practice, OLF Choctaw is closed for COMTRAWING FIVE normal operations.

The Air Operations Department of NAS Pensacola will see a significant impact on its mission as a result of the introduction of the fleet into the Gulf of Mexico. The Air Operations Department is responsible for air traffic control of fleet-related flight operations over the Gulf of Mexico. A Fleet Area Control Surveillance Facility (FACSFAC) is planned for Forrest Sherman Field to handle increased air traffic control responsibilities associated with the operational aircraft carrier.

EXISTING CONDITIONS

The development potential of NTTC Corry Station is directly affected, both positively and negatively, by natural and man-made factors. In this chapter, these factors, as specifically related to Corry Station, are identified and evaluated, and issues arising from them are explored.

Natural Assets and Constraints

Topography

NTTC lies within the topographic region known as the Coastal Lowland, a nearly level and poorly drained area which extends about twelve miles inland from the coast. Elevations range from twenty to thirty feet above Mean Sea Level (MSL) at Corry Station. Topography is not considered a constraint to development.

Soils

Soils within the vicinity of the NTTC generally can be described as fine, light-colored acid sands, which primarily are well-drained. There is nothing in the available soil data that indicates potential construction problems due to soil composition. However, site preparation for the construction of the new Applied Instruction Building (P-109) at the west end of Corry Station recently uncovered cypress tree stumps a few feet below the existing ground surface. Indications are that some sections of Corry Station were previously swamp areas that have since been filled in. Consequently, site selection for future construction projects should be based on an analysis of actual soil samples for specific building sites.

Geology

Corry Station is located in the Coastal Plain Province which consists of unconsolidated sands, silts and clays deposited during sea level fluctuations. This thick layering of material extends from the surface to a depth of as much as 1,000 feet. In the southern part of Escambia County, the larger Florida aquifer and this sand and gravel aquifer are separated by a Miocene clay unit. Groundwater is thus retained in the upper limestone of the Florida aquifer and is plentiful and of good quality.

Wetlands and Flood Plains

Flood plains are defined as the lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, those areas subject to a one percent or greater chance of flooding in any given year (i.e., the 100-year flood plain). Based on information provided by the Corps of Engineers, there are no areas at Corry Station which are subject to recurring flooding, nor are

there defined wetlands on base. Jones Swamp, to the southwest, is the nearest wetland area but it is located off base.

OLF Bronson, which is used partially as a recreation complex under a joint undertaking between NAS Pensacola and NTTC, does contain some wetland areas and is also affected to a small degree by a 100-year flood plain along Perdido Bay. (See Figure III-1A.) The wetland areas found along the southern and eastern property line of OLF Bronson are generally classified as palustrine (fresh-water marshes) or estuarine. An estuarine wetland area has been identified along the shoreline at Nix Point.

The Pensacola area, nevertheless, has experienced flooding on various occasions as a result of hurricane storm activity. Major storms occurred in 1906, 1917 and 1926 with high tides of 10.8 feet and 9.4 feet reported in Pensacola Bay in the storms of 1906 and 1926 respectively. Hurricane-resistant construction methods would be advisable only as to windloading.

Forests and Vegetation

Several stands of planted slash pine ranging in age from 15 to 23 years old are managed at Corry Station. Management is guided by the Forest Management Section of the Natural Resources Management Plan prepared in 1988 by the Southern Division, Naval Facilities Engineering Command. The pine stands occur along abandoned runways in areas that were previously mowed (See Figure III-1). Management practices include periodic thinnings and prescribed burnings to develop mature stands of large trees for future multiple use. Figure III-1A identifies the forest use managementd areas at OLF Bronson.

In addition to slash pine, oak, pecan and palm trees are present. Other vegetation consists of Pensacola Bahia and St. Augustine grasses, and locally adapted ground cover, shrubs and other ornamentals.

Several plant species listed as threatened or endangered by state or federal agencies have been observed at NAS Pensacola and OLF Bronson. These include Florida Department of Agriculture (FDA) listed endangered species such as the white-top pitcherplant, large leaved jointweed, and water sundew. None of these species has been found at Corry Station.

Fish and Wildlife

As noted earlier in Chapter II (Regional Profile) a number of fish and wildlife species have been observed within the Pensacola Naval Complex based upon a field survey conducted at NAS Pensacola and OLF Bronson. At present, sightings of any of the animals listed in Table II-1 have not occurred at Corry Station. Because there are no water bodies within the boundaries of Corry Station it can be safely assumed that there are no endangered fish habitats on the station.

ENVIRONMENTAL SENSITIVE AREAS OLF BRONSON

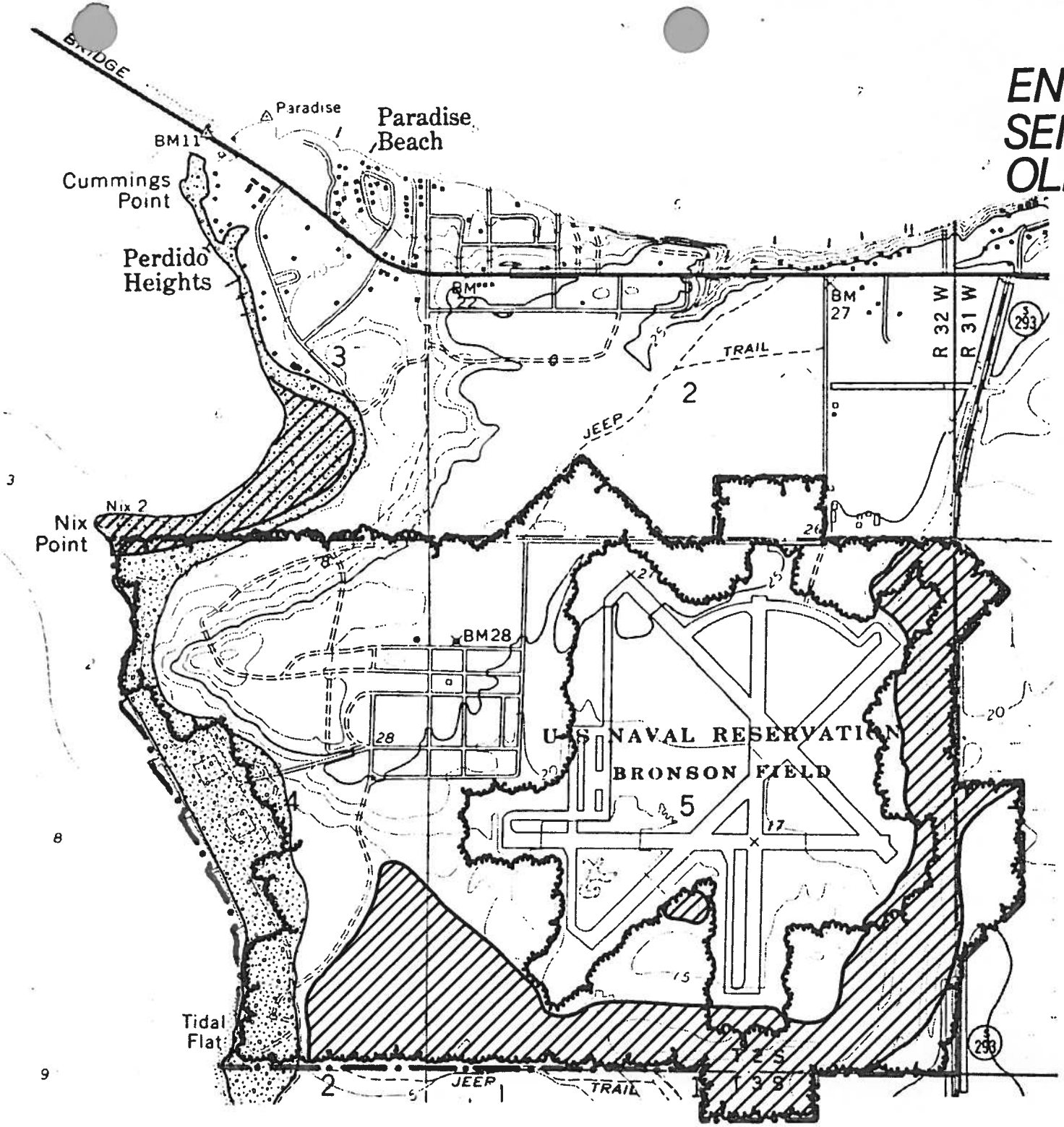
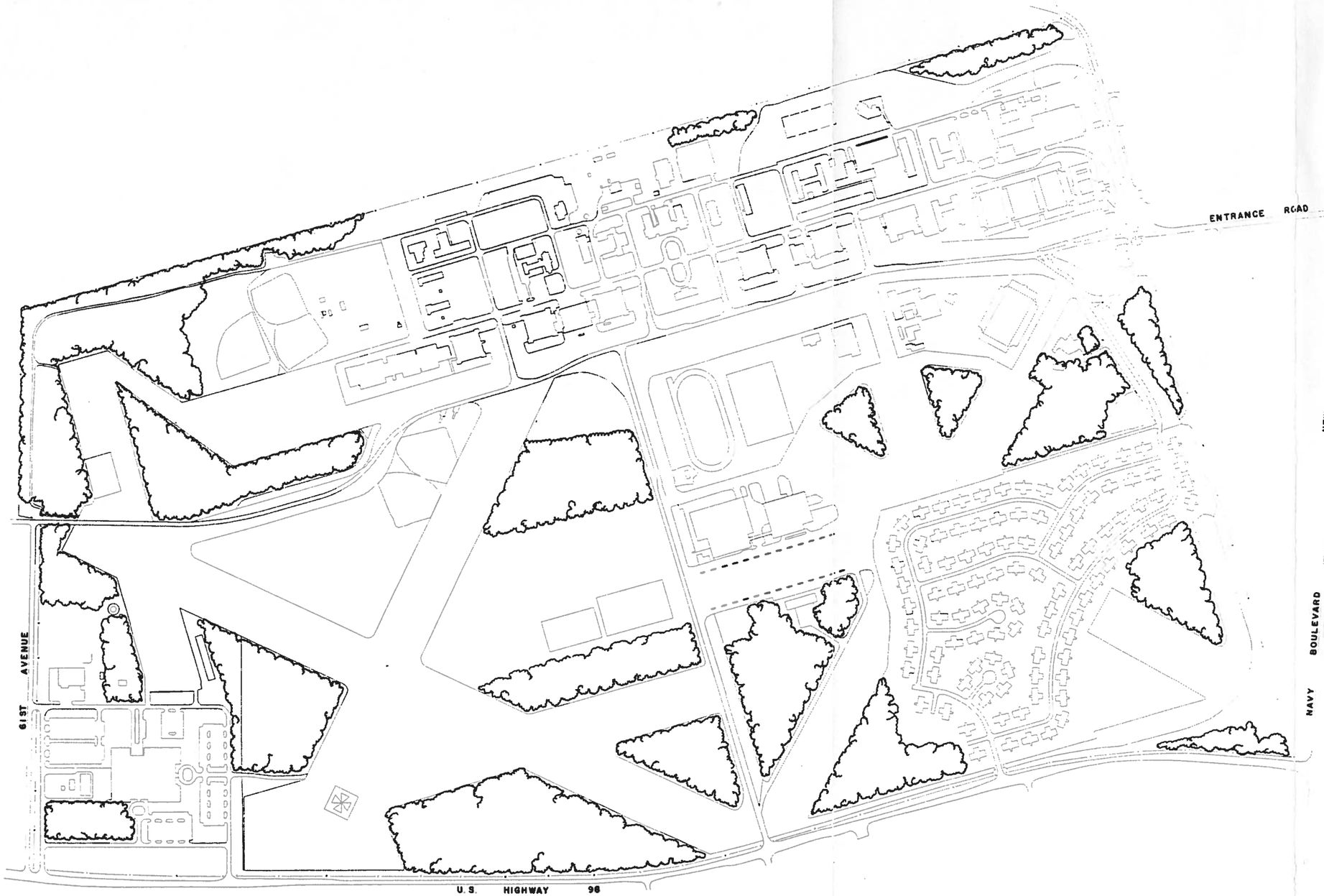


FIGURE III-1A

NATURAL RESOURCE MANAGEMENT AREAS
Corry Station

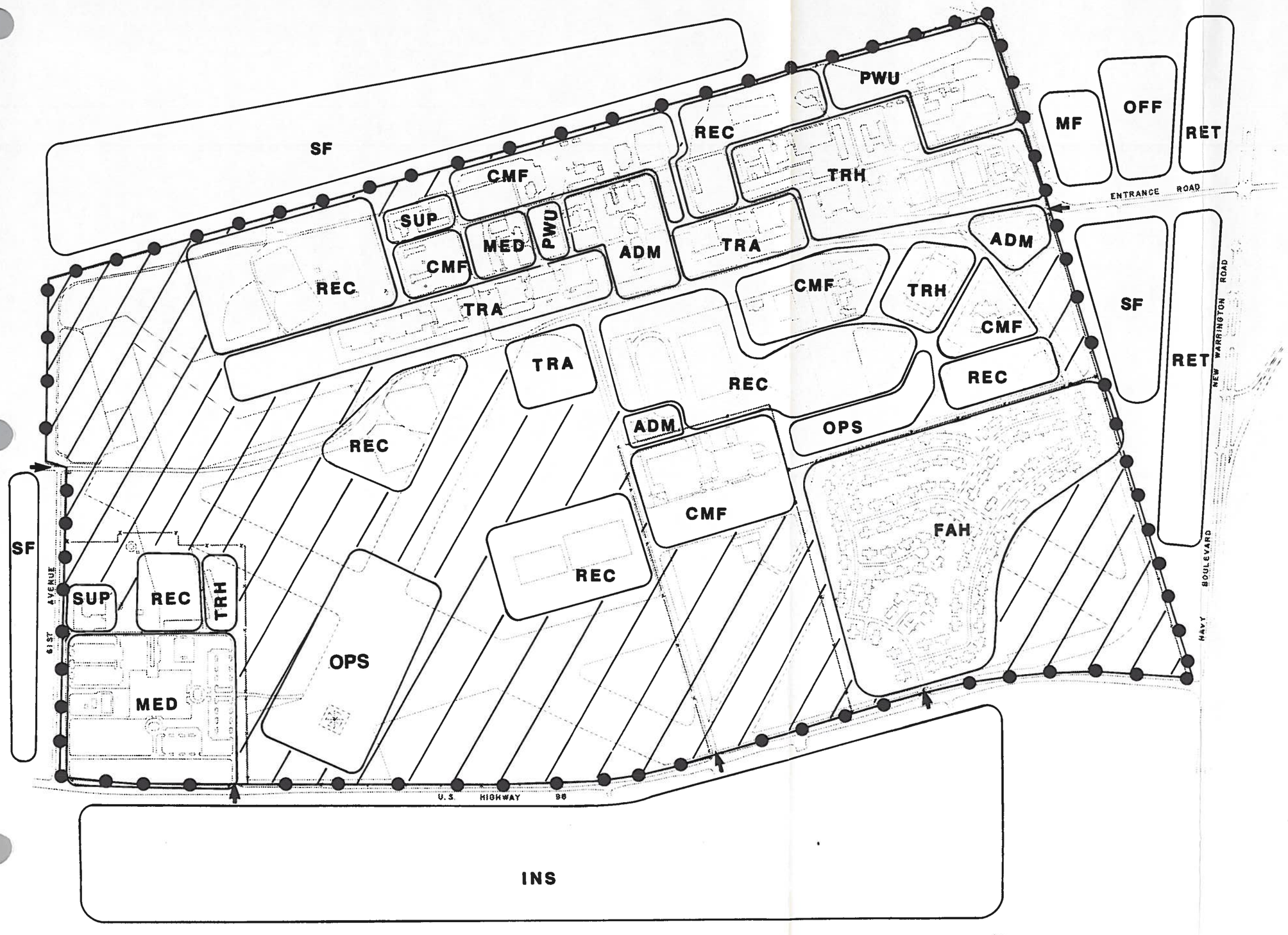


FOREST USE MANAGEMENT

200 0 200 400 600
SCALE IN FEET

FIGURE III-1

EXISTING LAND USE Corry Station and Surrounds



ON BASE LAND USE

- ADM – ADMINISTRATION
- CMF – COMMUNITY FAC.
- FAH – FAMILY HOUSING
- PWU – PUBLIC WORKS UTILITIES
- MED – MEDICAL/DENTAL
- OPS – OPERATIONS
- REC – RECREATION
- SUP – SUPPLY
- TRA – TRAINING
- TRH – TROOP HOUSING
- ▨ – NOT DEVELOPED
- –●– – STATION BOUNDARY
- ← – ACCESS POINTS

OFF BASE LAND USE

- SF – SINGLE FAMILY RESIDENTIAL
- MF – MULTI-FAMILY RESIDENTIAL
- INS – INSTITUTIONAL
- OFF – OFFICE COMMERCIAL
- RET – RETAIL COMMERCIAL

200 0 200 400 800
SCALE IN FEET

FIGURE III-2

Summary

There are no significant natural constraints to site development at Corry Station. High, level ground; good quality water; acceptable soils; and beautiful trees are natural assets that give the NTTC wide latitude in accommodating future needs. A sound precaution, however, would be to construct new buildings so as to minimize wind damage from occasional hurricanes. In addition, the risk from earthquakes to any structures housing extremely sensitive operations should be weighed prior to construction budgets being fixed.

Man-Made Assets and Constraints

Historical and Archaeological Perspective

Although flags of several nations have been flown in the Pensacola region since the sixteenth century, a Naval presence was not established until President John Quincy Adams and Samuel Southard, Secretary of the Navy, arranged to build a Navy yard on Pensacola Bay in 1825. The yard was decommissioned in 1911 after a yellow fever epidemic, but was recommissioned as the first U.S. Naval Air Station in 1913 as interest in naval aviation grew.

This interest led to Corry Field's commissioning in 1928 as an active aviation training command. The field was named for Lieutenant Commander William M. Corry, Jr., a Medal of Honor winner killed in an aircraft accident. After being decommissioned as an air station in 1958, it was recommissioned in 1961 as the Naval Communications Training Center. The command's name was changed in 1973 to the Naval Technical Training Center when it became the center for electronic warfare training.

In spite of the station's sixty-year history, there are no buildings listed on the National Register of Historic Places, according to files maintained by the Division of Archives, for the State of Florida. Neither are there any archaeological or historical sites known to exist within the NTTC's jurisdiction.

Installation Restoration (IR) Sites

There are no known Installation Restoration (IR) sites located within the boundaries of Corry Station.

Regional Socioeconomic Considerations

Demographics: Corry Station is located in a major urban area with a total population of over 344,000 people. The population characteristics (i.e., age, race and sex) has changed very little in recent years. With an increasing rate in per capita income, the available labor force is obviously fairly stable and presents no constraints on the ability of NTTC to meet its long-term planning objectives.

Housing: With limited funds available for the construction of additional military family housing, it is very important that the local civilian community provides enough housing resources to support current and projected military base loading levels. Available housing data indicate that there is a sufficient number of dwelling units being added each year to the local housing inventory in the mid-to-upper price range. However, housing for lower-income families, which includes the lower enlisted grades of military personnel, is not being developed, particularly multi-family rental units. This situation is projected to worsen over time, and will impact on the community's ability to house these families, underscoring a requirement to program the construction of additional military family housing in support of NTTC's anticipated needs.

Economics: Historically, the region's economy has been influenced by three major economic forces: government, industry and tourism. Though there have been adjustments as to the relative importance between these primary indicators, the overall economic posture of the region remains very strong.

Local Community Planning

As stated in Chapter II (Regional Profile) both Escambia County and the city of Pensacola have active comprehensive planning programs currently in effect. Consequently NTTC, in cooperation with these local governmental agencies, has the ability to adequately plan and provide for the future development of their respective geographic areas in mutual harmony.

Compatible on-base and off-base land uses generally exist along most of the Corry Station boundaries. Pensacola Junior College to the south is very compatible with adjacent on-base activities and also serves as a reasonable buffer between the base and higher intensity development proposed for the area further south. To the west and north of Corry Station are established residential neighborhoods which are compatible with existing and projected NTTC activities. Due to more intense on-base building development, however, it will be necessary for NTTC to maintain an adequate buffer or building set-back line along its western and northern boundaries. (See Figure III-2)

The one area where special cooperation between the station and local government is critical to the image of Corry Station is that area along Entrance Road leading to the main (east) gate from New Warrington Road. Vacant land and declining residential properties makes this area a prime candidate for initiating some form of cooperative effort for redevelopment. This area receives the greatest amount of traffic entering the main gate to NTTC, yet the county road is not well-maintained, nor does the adjacent land development provide a very attractive visual entrance to the station.

Escambia County has subdivision regulations, zoning regulations and most other codes currently in place to adequately control the density and use of land development. The recent enactment of county-wide zoning by the Escambia Board of County Commissioners and the specific provisions indicated for land

areas adjacent to Corry Station are of significant importance to NTTC and its future master plan.

In addition to county-wide land use regulations, Escambia County has recently adopted an Airport Land Use Ordinance. It repeals a much less comprehensive ordinance and applies to lands surrounding all airport facilities in the county including the Naval Hospital Helipad at Corry Station. The airport land use ordinance is the result of a growing community awareness that increasing urbanization within the Pensacola region, particularly in the immediate environs of airports and aircraft operation training sites, was leading to serious land use conflicts, which in turn tended to create undesirable environmental and public safety conditions.

Zoning around Corry Station is primarily residential, with a small amount of retail commercial near the extreme southeast corner of the base and mixed residential and office along the southwestern boundary. Specific zones are:

R-1 Low Density single-family at 0-4 Dwelling Units (DU)/acre

R-2 Low-medium density single-family at 0-7 DU/acre

R-4 Medium-high density multiple-family at 0-15 DU/acre

R-5 High density residential and office at 0-20 DU/acre

C-1 Retail Commercial

The existing zoning districts are generally consistent with the existing land development around Corry Station. The R-1 low density single family district reflects the residential development to the north and northwest of the station. The R-2 medium density residential district extends along the eastern and western boundary and to the immediate south of the existing family housing area at Corry Station. A small area of R-5 high density residential and office development exists on the north side of Entrance Road, just outside the NTTC main gate, and a much larger area to the south of Pensacola Junior College. The only nearby C-1 retail commercial zoning extends along Navy Boulevard and New Warrington Road.

Existing Facilities and Conditions

Table III-1 lists the 26 tenants of the NTTC; Figure III-3 shows their location aboard Corry Station.

TABLE III-1:
TENANT ACTIVITIES
NTTC CORRY STATION

	TENANT	BUILDINGS
1.	Company "K", Marine Support Battalion	502, 3716
2.	U.S. Army Intelligence School, Fort Devens Pensacola Detachment	502
3.	USAF, 3482nd Technical Training, Pensacola	502
4.	Personnel Support Activity Detachment, Pensacola	502
5.	Warrington Bank Branch	502
6.	Pen-Air Federal Credit Union Branch	502
7.	Scheduled Airlines Ticket Office (SATO)	502
8.	Defense Investigative Service Office, Corry Branch	502
9.	Naval Security Group Field Office	502
10.	U.S. Post Office	502
11.	Management Information and Instructional Systems Activity (MIISA) Unit	502
12.	Fire Station Engine Company 4/Reserve 5, NAS Pensacola	504
13.	Navy Campus for Achievement	506
14.	Naval Electronic Systems Engineering Center, Charleston (NAVELEXCEN CHASN)Detachment Representative	3779
15.	Naval Electronics Systems Security Engineering Center (SAVELEXSECEN) Washington, D.C., Detachment Representative	3779
16.	Training Development Unit (TRADEVU) Corry Station	513, 516
17.	Naval Reserve Security Group Activity Northwest 110	513, 523
18.	Pensacola Boys Base, FL Dept. HRS, District 1	3780
19.	Naval Investigative Service Resident Agency	531

TABLE III-1
TENANT ACTIVITIES
NTTC CORRY STATION
(Continued)

	TENANT	BUILDINGS
20.	Naval Aerospace & Regional Medical Center Branch Clinic	535
21.	Navy Exchange Complex Activity	540
22.	NETPMSA (Graphics Branch & Training Aids Issue), formerly Naval Education and Training Program Development Center (NETPDC) Saufley Detachment (Audio Visual Support)	545
23.	Resident Officer in Charge of Construction (ROICC) Corry Station	1033
24.	Naval Training Systems Center, Regional Office, Atlantic, Pensacola Field Engineering Division	1099
25.	Family Services Center, Corry Branch	3714, 3717
26.	Navy Regional Dental Center Branch Clinic	3719
27.	Naval Security Group Detachment	3775

Source: NTTC, Staff Civil Engineer, 1986
Tenant Activity Questionnaires, 1986;
NAVFAC P-164 Detailed Inventory of Naval Shore Facilities, 1987.

NOTE: See Figure III-3 for location of buildings

The NAVFAC P-164 Detailed Inventory of Naval Shore Facilities (September, 1987) lists 75 buildings located at the NTTC. Since then, a few other buildings have been constructed, such as an exchange gas station mid-base near the Corry Mall and a Naval Security Group operations building just north of the family housing area. Approximately 84 percent of the buildings are considered permanent construction, 12 percent are classified as semi-permanent and four percent are temporary. The buildings' ages may be grouped as shown in Table III-2:

TABLE III-2 : NUMBER, AGE AND TYPE OF CONSTRUCTION OF BUILDINGS NTTC CORRY STATION

	Number of Buildings				
Year Built	Permanent	Semi-Permanent	Temporary	Total	%
1931-1939	13	0	0	13	17
1940-1949	11	5	2	18	24
1950-1959	1	0	0	1	1
1960-1969	6	1	0	7	10
1970-1979	23	1	0	24	32
1980-1985	9	2	1	12	16
TOTAL	63	9	3	75	100

Source: NAVFAC P-164 Detailed Inventory of Naval Shore Facilities, September 30, 1987

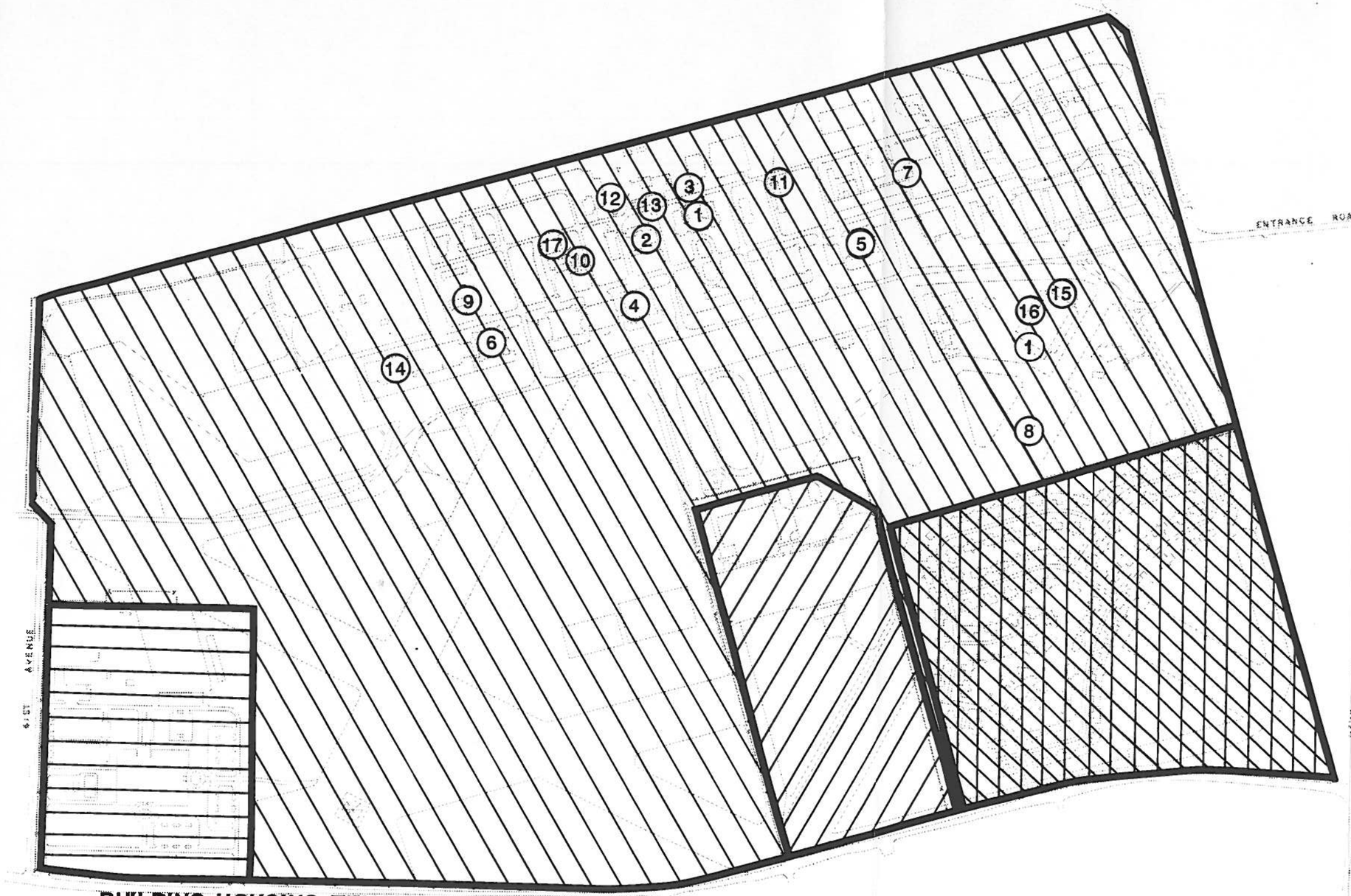
Existing activities have been grouped into nine functional land use categories using category codes. The approximate amount of building square footage currently utilized for each land use is shown in Table III-3. Together, troop housing and training use about 72 percent of total available building space, community facilities and recreation use 15 percent, while the remaining functions utilize about 13 percent. The proportion of building usage by each function is shown more graphically in Figure III-4.

Table III-3 also depicts the relative adequacy of available facilities to house each function.

- Those functions with the highest percentages of adequate facilities are medical and supply (100 percent), training (96.6 percent) and maintenance (94.2 percent).

- Functions with the greatest proportion of substandard facilities are administration (49.9 percent) and troop housing (32.8 percent).

LOCATION OF ACTIVITIES
Corry Station



ACTIVITIES

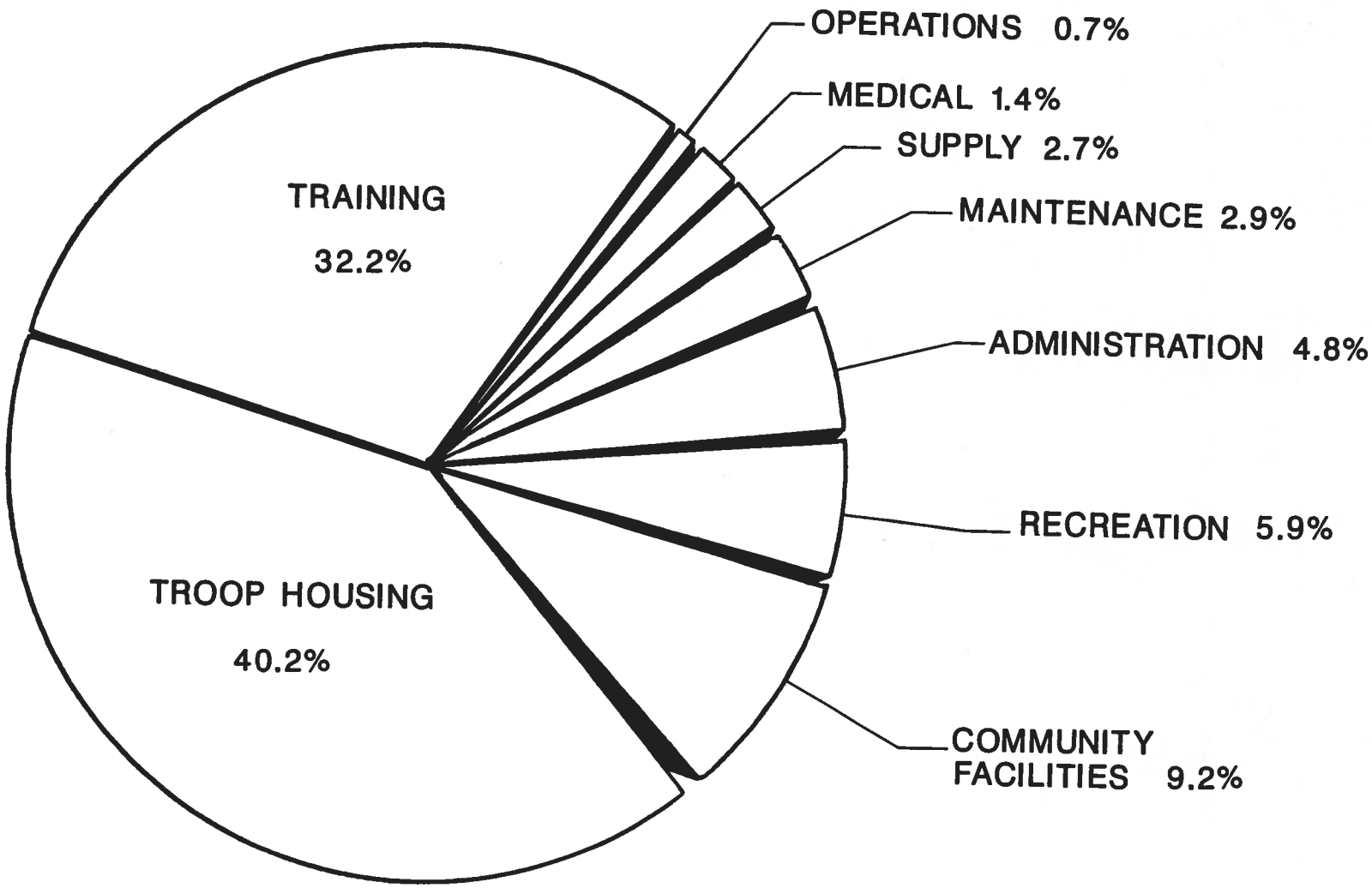
- NTTC
- FAMILY HOUSING
- NAVAL HOSPITAL
- NAVY SHOPPING MALL

200 0 200 400 600
SCALE IN FEET

BUILDING HOUSING TENANT ACTIVITIES

① 502,3716	⑦ 523	⑬ 1033
② 504	⑧ 3775	⑭ 1099
③ 506	⑨ 3780	⑮ 3714
④ 3779	⑩ 535	⑯ 3717
⑤ 513	⑪ 540	⑰ 3719
⑥ 516	⑫ 545	

FIGURE III-3



BUILDING USAGE BY FUNCTION
Corry Station

FIGURE III-4

TABLE III-3: BUILDING USAGE AND ADEQUACY BY FUNCTION

NTTC CORRY STATION

FUNCTION	CAT.CODE	EXISTING (SF)	ADEQUATE SF	ADEQUATE % OF CAT.	SUBSTANDARD SF	SUBSTANDARD % OF CAT.	INADEQUATE SF	INADEQUATE % OF CAT.
Operations[1]	111-149	7,428	5,104	68.7	204	2.7	2,120	28.5
Training	170-179	351,943	339,943	96.6	12,000	3.4	0	--
Maintenance	210-219	31,983	30,136	94.2	1,847	5.8	0	--
Supply	400-451	29,490	29,490	100.00	0	--	0	--
Medical	500-550	15,346	15,346	100.00	0	--	0	--
Administration	600-690	52,038	9,884	19.0	25,969	49.9	16,185	31.1
Troop Housing[2]	720-725	440,125	192,613	43.8	233,505	53.0	14,007	3.2
Community Facilities	730-740	100,649	53,030	52.7	27,226	27.0	20,393	20.3
Recreation[3]	740-750	64,794	42,070	64.9	0	--	22,724	35.1
TOTAL	% OF TOTAL	1,093,796	717,616	65.6	300,751	27.5	75,429	6.9

#15 larger now

Sources: NTTC Engineering Analysis, 1986; Navy Public Works Center; NAVFAC P-164 Detailed Inventory of Naval Shore Facilities, September, 1987

1 Does not include 1 filling station or 4,000-gallon vehicle ready fuel storage, both of which are considered adequate.

2 Includes enlisted dining facility (detached). Existing sq.ft. were taken from the Detailed Inventory.

3 Does not include 12 substandard outdoor playing courts, or 7 playing fields, a 25-meter outdoor swimming pool and a recreation ground, all adequate.

- Those functions with the highest percentages of inadequate space are recreation (35.1 percent), administration (31.1 percent) and operations (28.5 percent).

An important observation which can be made by looking at Table III-3 is that of the 1,093,834 square feet of existing building space, 65.6 percent is considered adequate, 27.5 percent is substandard and 6.9 percent is inadequate. According to the 1980 NTTC Activity Master Plan, 87 percent of existing building space was adequate. Therefore, there has been a reduction in adequacy of approximately 24 percent from 1980 to the present. Clearly, high proportions of inadequate or substandard space can inhibit the efficiency of base missions. See Figure III-5 to more readily see the relative adequacy of existing buildings to meet the functional needs of NTTC.

Congressional and Executive Branch Mandates

Federal law and executive orders require that federal installations consider certain factors in conducting their operations or in making siting decisions. Many of these mandates require or encourage cooperation with State or local governments in the decision-making process. The major mandates and their State and local implications are summarized in the following paragraphs.

Flood Plain Management: Executive Order 11988 requires identification of 100 - and 500 -year flood plains. Once identified, these areas are, to the extent possible, to be treated as uninhabitable unless development is undertaken consistent with the standards of the National Flood Insurance Program. There are no 100 - or 500 -year flood plains at Corry Station.

Protection of Wetlands: Executive Order 11990 requires identification and preservation of wetlands, which are areas that are inundated by surface or groundwater frequently enough to support vegetation or aquatic life requiring such conditions. There are no wetlands within the bounds of Corry Station.

Protection of Endangered Species and Habitat: The Endangered Species Act of 1973, as amended, requires that plants or animals classified as endangered, their habitat and other areas determined to be of special biological importance be identified and protected. The Fish and Wildlife Coordination Act requires that federal agencies consult with USFWS, NMFS and State agencies before construction activities are undertaken to assure that wildlife conservation receives early consideration. No endangered species or habitats have been identified at Corry Station.

Coastal Zone Management (CZM): The Coastal Zone Management Act of 1972, as amended, requires that the actions of federal agencies be consistent, to the maximum extent practicable, with federally approved state coastal management programs. These programs are designed to balance both protection and development of coastal resources.

The Florida CZM program is managed by the Department of Environmental Regulation (DER), with the Pensacola Regional representative being the West Florida Regional Planning Council. The local command provides CZM coordination between the Navy and DER. Southern Division, Naval Facilities Engineering Command supports the local command by providing technical assistance.

Historic Preservation: The National Historic Preservation Act of 1966, as amended, requires that proposed actions affecting properties on, or eligible for, the National Register of Historic Places be reviewed by the Advisory Council on Historic Preservation. There are no areas of historic, architectural, archaeological or cultural significance at Corry Station, according to records maintained by the State of Florida, Division of Archives.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA): Public Law 96-510 provides for liability, compensation, clean-up and emergency response for hazardous substances released into the environment and for the clean-up of inactive hazardous waste disposal sites. This act established the so-called Superfund.

Superfund Amendments and Reauthorization Act of 1986 (SARA): Public Law 99-499 extends and amends CERCLA regarding response and liability, emergency planning, and establishment of a radon gas and indoor air quality research program.

Resource Conservation and Recovery Act of 1976 (RCRA): Public Law 94-580 provides technical and financial assistance for the development of management plans and facilities for the recovery of energy and other resources from discarded materials, and regulates the management of hazardous waste.

Infrastructure Systems

In addition to the constraints imposed or opportunities afforded by human planning and development in and around Corry Station, there is another major influence: infrastructure. A description and analysis of these basic facilities, upon which growth depends, follow.

Capital Investment: Land and facility holdings at NTTC are categorized as either Class I Property (real estate) or Class II Property (structures). Most of the Class I Property was donated to the government, and current acreage is approximately 431 acres. The estimated current fair market value of the land is $1,875,240, or $4,346 per acre.

Class II Property values at NTTC are estimated at $38,615,421. Replacement costs would be about $140,640,451.

Air Conditioning: No central air conditioning system exists for all buildings in NTTC. Each building is cooled by units ranging from small window units to large central units for the specific building. All steam absorber chillers have been removed and replaced with electrical centrifugal

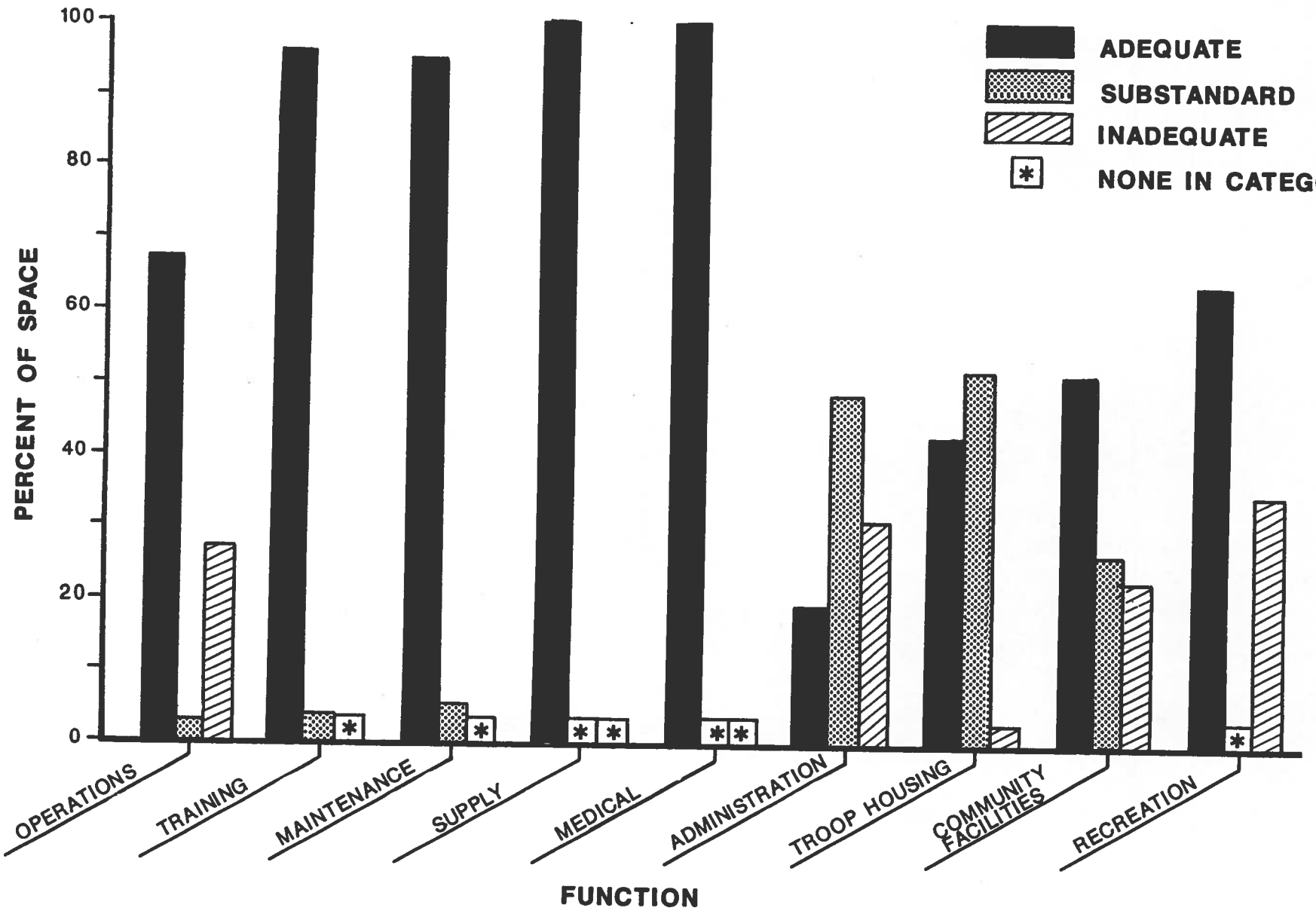
chillers. A project is planned to combine existing chilled water units in six training buildings and two barracks to form a central chilled water system. The project will replace a varied assortment of 14 water chillers serving the 6 training buildings and 2 barracks which operate year round and are only partially loaded. With this improvement, the capacity of this project is considered adequate for present loads. The addition of training facilities, troop housing and administrative facilities in the undeveloped areas of Corry Station will require air conditioning in the new facilities.

Street Lighting: Both incandescent and mercury vapor systems are employed at NTTC. Systems are served by overhead and underground service. The street light distribution system does not now extend into the undeveloped area of NTTC and expansion of facilities such as training, troop housing and administrative support for NTTC will require expansion of the existing street lighting system. Special Project C9-86 will add street lights to the marching lane which presently has none.

Natural Gas: Natural gas is supplied to NTTC by the United Gas Pipeline Company, Mobile, Alabama. The only known constraint on the natural gas system is the possibility of supply limits imposed by United Gas Pipeline Company; however, fuel oil is available as a backup energy source. The government-owned steel pipe distribution system is considered to be in good condition with no history or anticipation of major maintenance requirements. Again, this distribution system does not now extend to the undeveloped area of NTTC. (See Figure III-6)

Potable Water: Potable water is supplied to NTTC by the Navy Public Works Center. All utility plants and systems located at NTTC are held on the NPWC plant accounts. Water supply is via eight existing water wells that pump to a 500,000 gallon ground-level reservoir. Water is pumped from the reservoir and treated, then pumped via booster pumps to the NTTC main distribution system (circa 1930) to ground water storage reservoirs at NASP. Included in the NTTC system are two elevated storage tanks (100,000 and 150,000 gallons) which maintain a 30 pounds per square inch pressure on the distribution system in case the booster pumps fail. A 6,000 gallon-per-minute standby diesel pump system is available for emergency use. Recently completed improvements to the distribution system added two new wells (improvements were to include five wells, however, three wells did not meet drinking water standards), three pumps in a new pumping station and an additional 200,000 gallon reservoir for raw water storage at Corry Station. Additional wells will be drilled at a later date. A new 24 inch finished watermain now connects Corry Station to the mainside complex. A 10 inch watermain tie-in to the new 24 inch main has been designed into the system for future tie-in to the NTTC area to supplement pressure and water use needs. (See Figure III-7.)

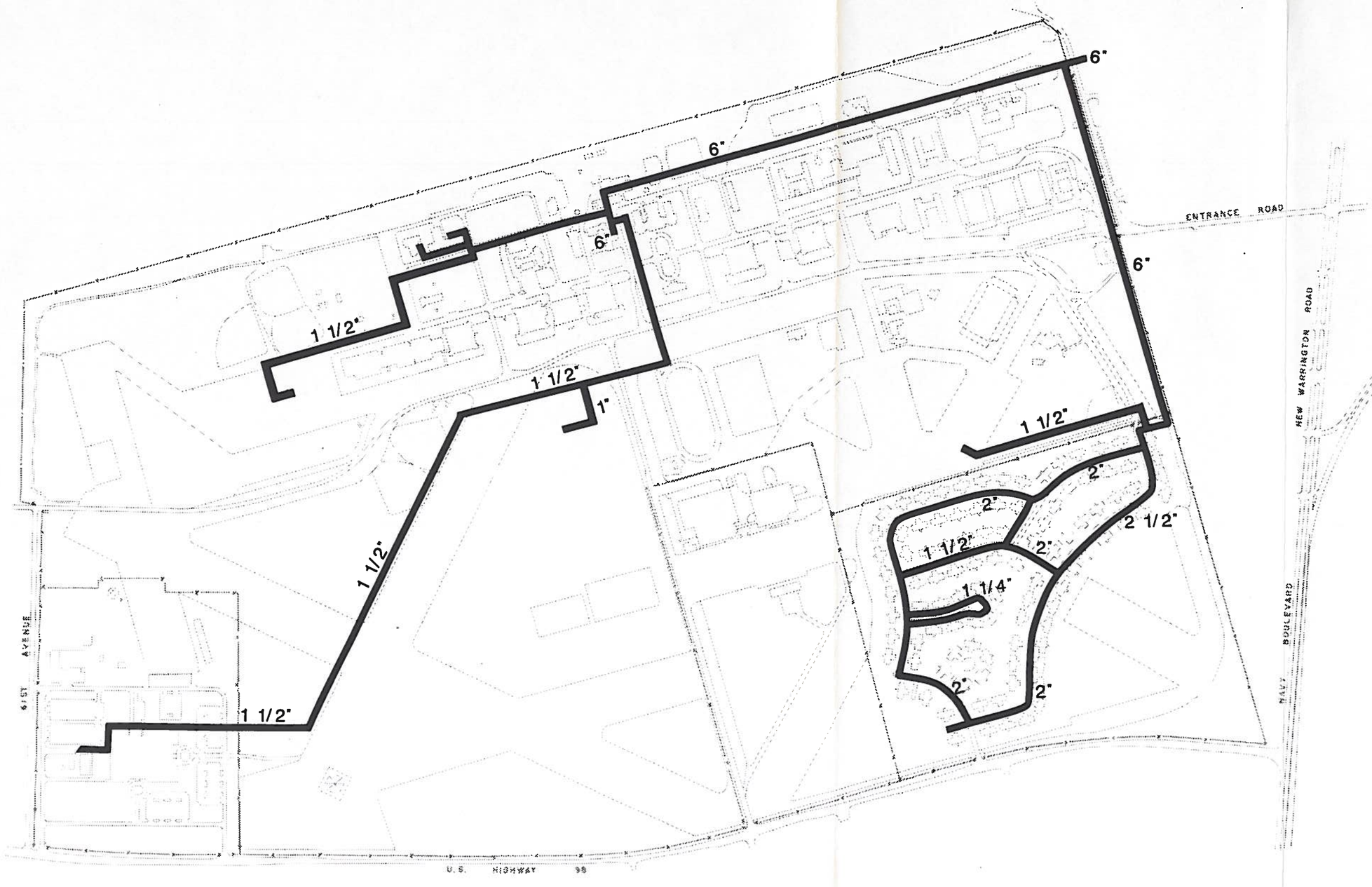
Land uses proposed for the undeveloped portion of Corry Station, such as training buildings and troop housing for NTTC, will require new water main extensions. Capacity is considered adequate with the new wells on line.



ADEQUACY OF EXISTING BUILDINGS TO MEET FUNCTIONAL NEEDS
Corry Station, 1986

FIGURE III-5

NATURAL GAS SYSTEM Corry Station

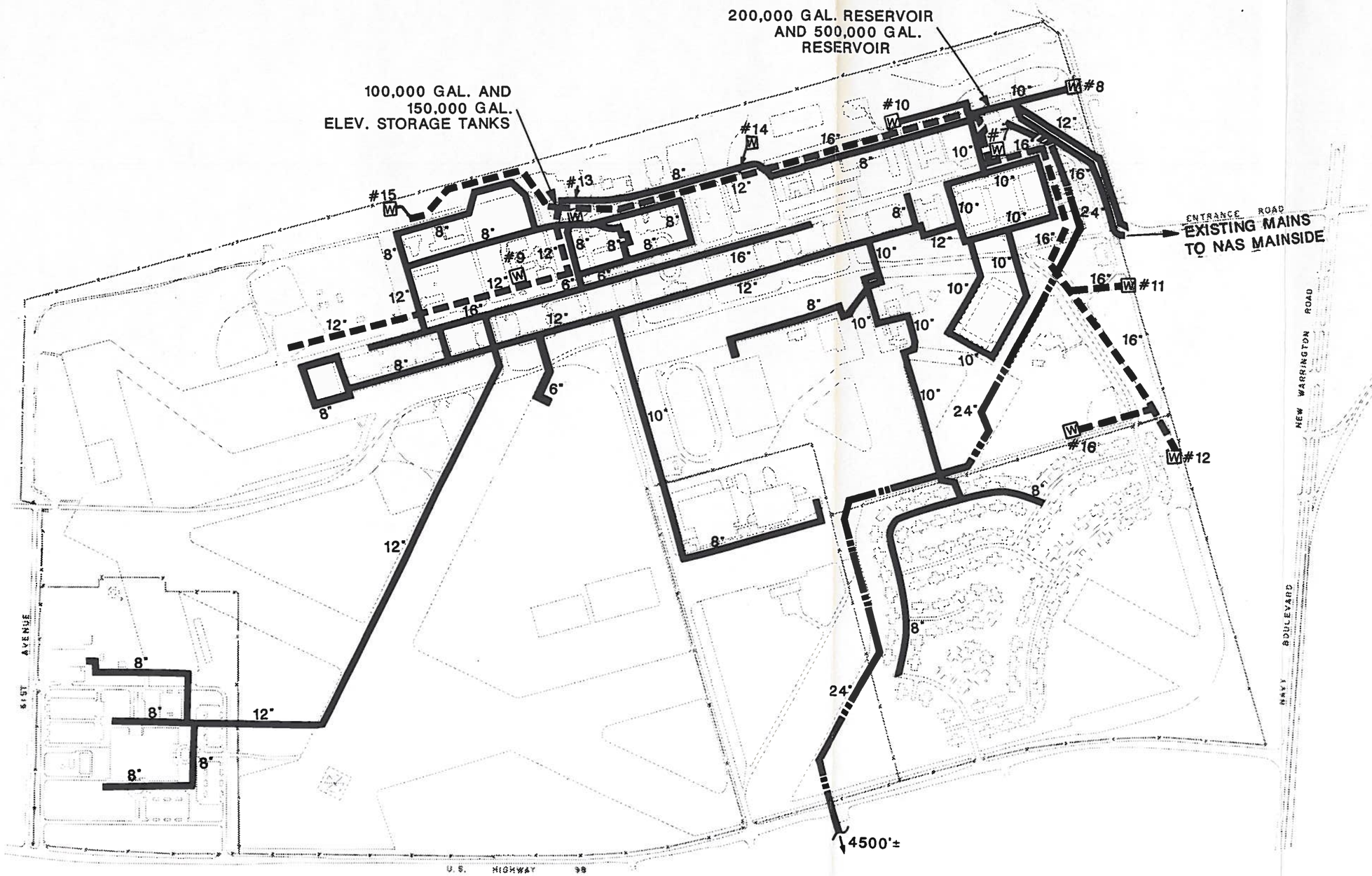


EXISTING GAS LINE

200 0 200 400 600
SCALE IN FEET

FIGURE III-6

WATER DISTRIBUTION SYSTEM Corry Station



NEW 24" TRANSMISSION MAIN TO NAS MAINSIDE

W #16 WELL + NUMBER

RAW WATER

TRANSMISSION MAIN

WATER LINE

200 0 200 400 600
SCALE IN FEET

FIGURE III-7

Compressed Air System: The compressed air system at Corry Station has all been abandoned. There is still a compressor operational in Building 504. Future construction of facilities requiring compressed air will have to include an air compressor sized to meet its total requirements.

Steam Distribution System: NTTC Corry Station has a central steam plant located in Building 504 that produces steam for distribution to the buildings at the station. (See Figure III-8) The plant has four boilers, two 15,000 pounds/hour Orr and Sembower water tube boilers and two 18,000 pounds/hour B & W water tube boilers. The two B & W boilers are scheduled to be removed and replaced with one 41,000 pounds/hour fire tube boiler during FY 89. Boilers are dual fired using natural gas as primary fuel and fuel oil as back up. The existing boilers are operating in a fully automatic mode. Adequate steam capacity will exist at the central steam plant for future expansion, but extension of steam lines will be required for future capital improvements or installation of site specific steam boilers.

Sanitary Sewer System: The wastewater collection system for NTTC consists of four lift stations and two metering stations and various diameter gravity sewer mains. The system is presently tied into Escambia County Utility Authority (ECUA) Warrington treatment plant. Because of increased rates for treatment and moratoria on new connections to the ECUA treatment plant, plans are underway to convert portions of the existing 12 inch diameter potable water main between Corry Station and the NAS mainside complex to a wastewater forcemain. This conversion will allow wastewater generated at NTTC to be pumped to the treatment plant at mainside. This project would provide the most economical method of treating NTTC's wastewater. The feasibility study for this conversion has been completed and design is in process. Adequate capacity exists at the mainside treatment plant for present and future loading requirements of NTTC. The existing wastewater collection system would have to be expanded and extended to meet the wastewater requirements of the proposed master plan for NTTC. (See Figure III-9.)

Industrial Wastewater System: No centralized industrial wastewater collection or treatment system exists for NTTC. The proposed land use plan for Corry Station will not generate large volumes of industrial waste at NTTC to warrant an industrial wastewater collection and treatment system.

Storm Drainage System: Existing drainage systems at NTTC and in the undeveloped areas of the former airfield discharge directly into Jackson Creek and Bayou Chico. Planned facilities in the land use plan for the undeveloped areas of Corry Station will require extensive improvement to the existing storm sewer system, including meeting current state water quantity and quality discharge parameters. (See Figure III-10)

These parameters are those outlined by the Northwest Florida Water Management District (NWFWMD), EPA and Florida Department of Environmental Regulations (FDER). Off-site discharge (quantity) will be limited to amounts which will not cause additional adverse off-site impacts. These flows may be regulated by local governmental criteria or standard NWFWMD criteria such as

a storm event of the 3-day duration, 25-year return frequency. Buildings would not be allowed to encroach into the flood plain. Water quality requirements would require the provision of facilities with wet detention volume for the first inch of storm water run off from the developed project or the sum total of a run off quantity of 2.5 inches times the percentage of site area considered impervious; whichever is greater. Dry detention volume required is typically equal to 75 percent of the amounts computed for wet detention.

Solid Waste Collection and Disposal: Refuse at NTTC is collected in dumpster type containers and emptied into mobile compactors. The Navy Public Works Center currently contracts with a commercial company for collection and disposal of refuse for NTTC. The present contract is renewable and appears to be quite satisfactory to NPWC.

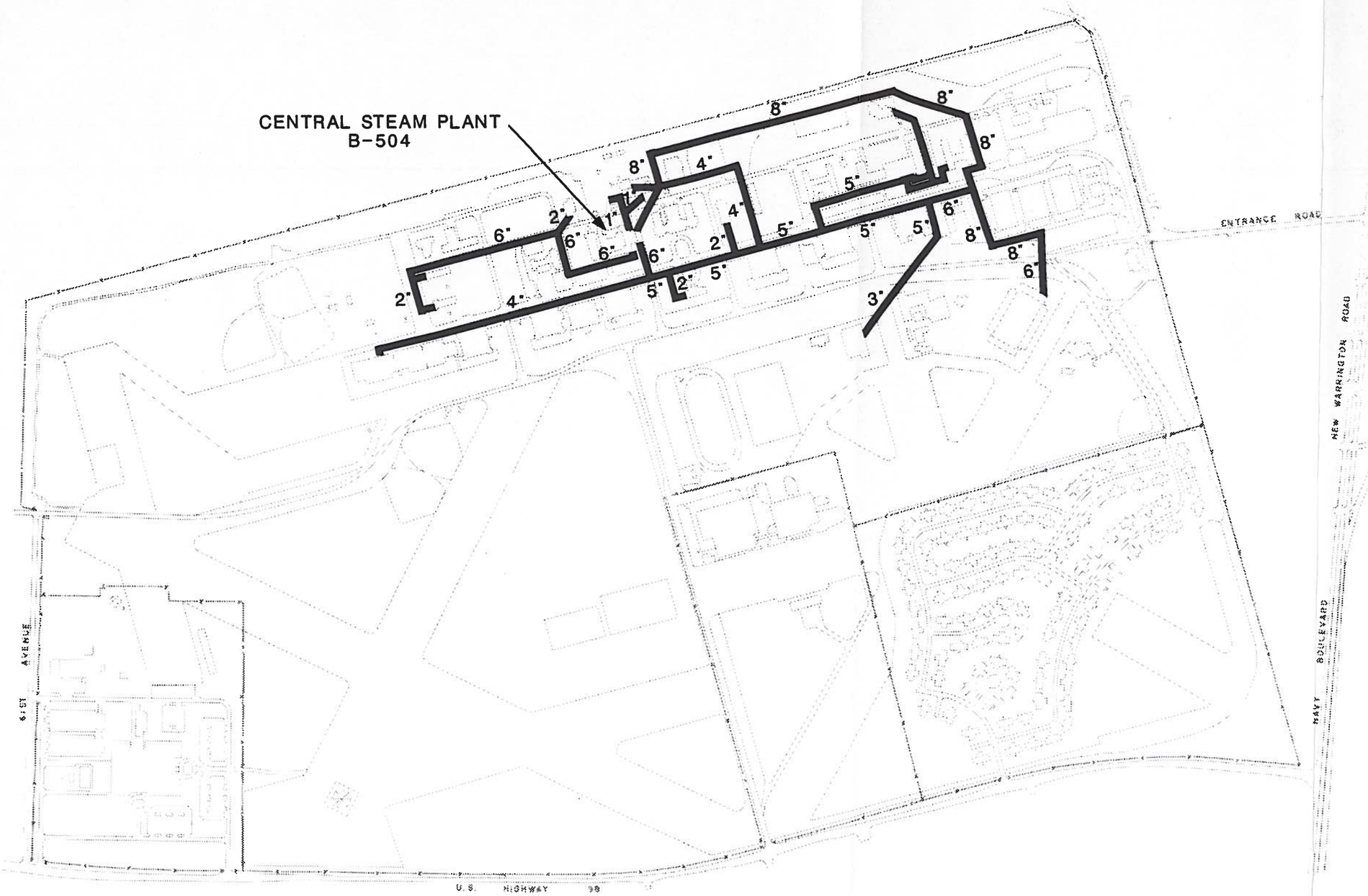
Hazardous Waste Collection and Disposal: NPWC collects all hazardous wastes generated by NTTC and provides hazardous waste storage for the NASP complex, including NTTC, in a permitted conforming storage facility at Building 3691 on Chevalier Field. DRMO provides 90-day storage for hazardous wastes turned into them by NPWC. No other hazardous waste is stored within the complex. Disposal of hazardous wastes by DRMO is by commercial contractor. The present contract is with Chemical Waste Management, Inc., and requires the contractor to remove hazardous wastes to an EPA-permitted land disposal site in Alabama. The contract also requires the contractor to incinerate materials not approved for landfilling at the permitted sites. Future development will have no adverse impact on collection and disposal of hazardous waste.

Electrical and Telephone Systems: Electrical power to NTTC is provided by Gulf Power Company. Electrical Power is transmitted at 12,470 volts. Point of connection and metering is north of the main gate on the east side of Corry Station. The main feed runs overhead along the perimeter of the base on the north side connecting to sectionalizing stations at Building 504 and north of Building 1099. (See Figure III-11) The voltage of the NTTC distribution system is 12 KV.

A recently completed MILCON Project (P-002) increased the capacity of NTTC electrical system. A new feeder originating at sectionalizing station "CW" connects four new switching stations "A," "B," "C," and "D". The switching stations allow loads to be switched so that new loads may be added in the future without creating an overload condition. The area of NTTC which is effected is the south east section including Buildings 3711, 3736, 3712, 3734, 3735, the commissary buildings and mall.

The Gulf Power Company transmission facilities are adequate for the existing and planned future needs. An emergency generator located in the central heating plant (Building 504) provides emergency power for the heating plant, Building 508, the water pumping station and sewage lift stations.

STEAM DISTRIBUTION Corry Station



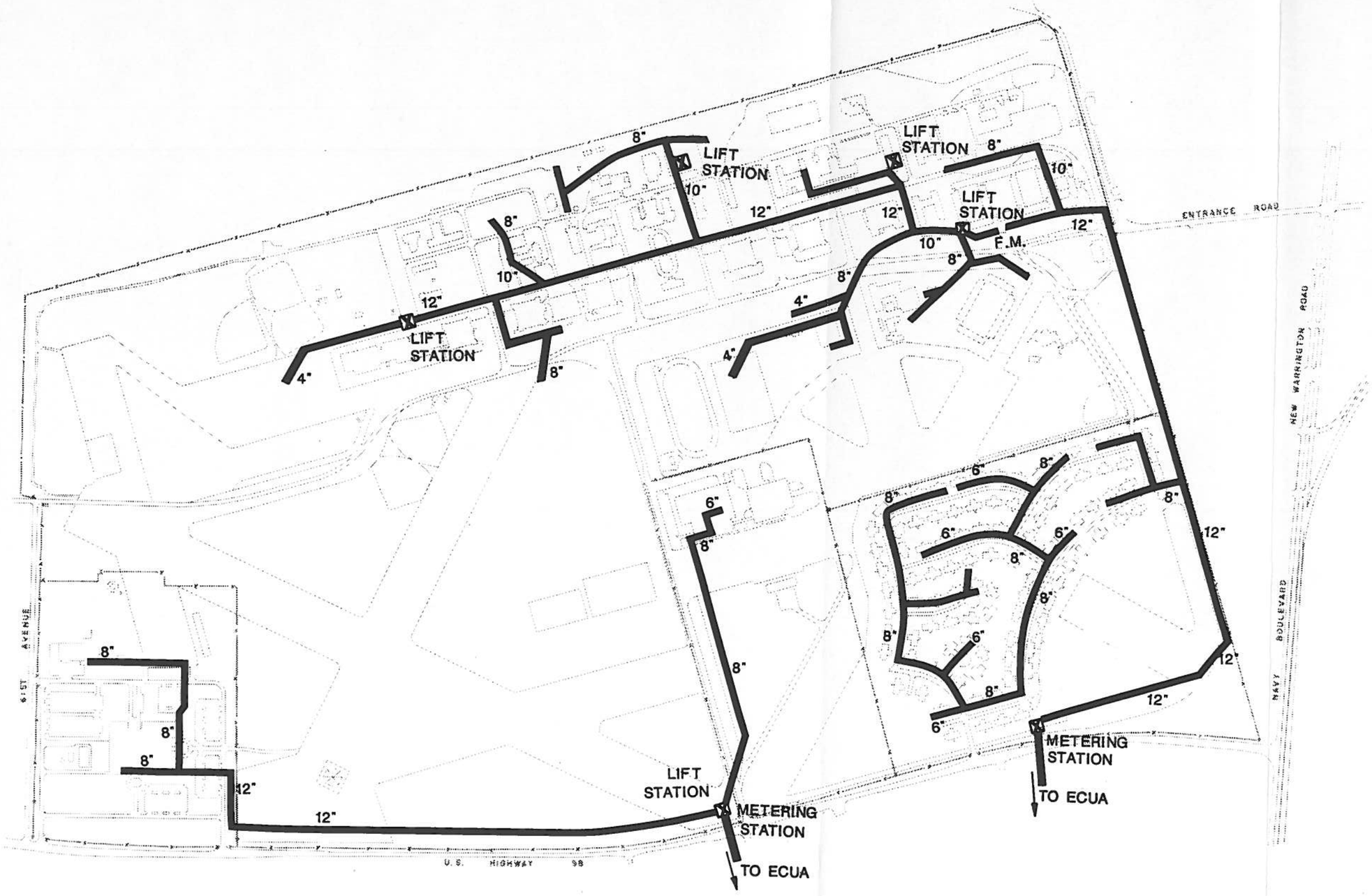
EXISTING STEAM LINE

2" PIPE SIZE

200 0 200 400 600
SCALE IN FEET

FIGURE III-8

SANITARY SEWERAGE SYSTEM
Corry Station



EXISTING SEWER LINE

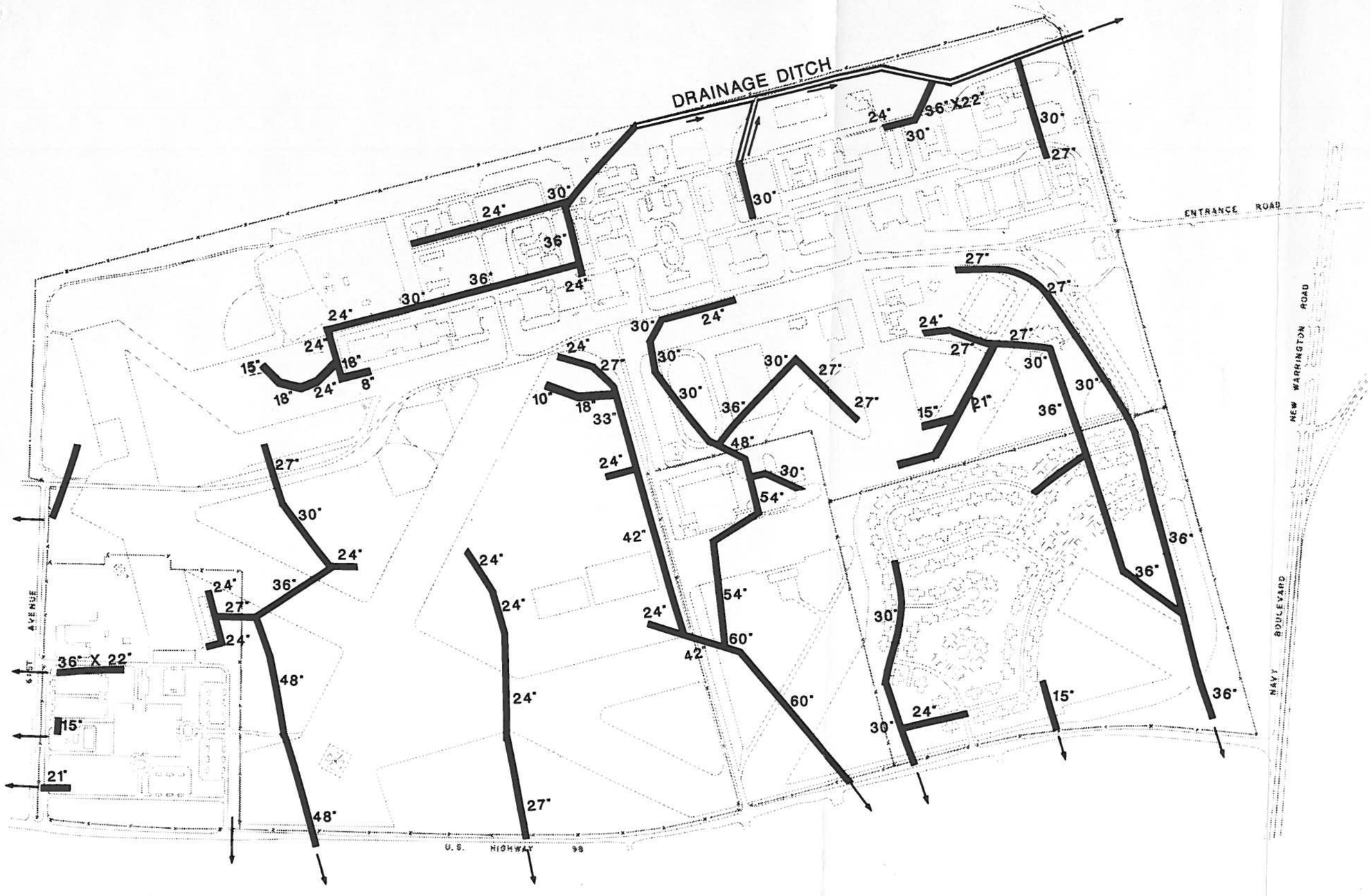
LIFT STATION OR METERING STATION

8" PIPE SIZE

200 0 200 400 800
SCALE IN FEET

FIGURE III-9

STORM DRAINAGE SYSTEM Corry Station



STORM SEWER

DRAINAGE DITCH

DIRECTION TO OUTFALL

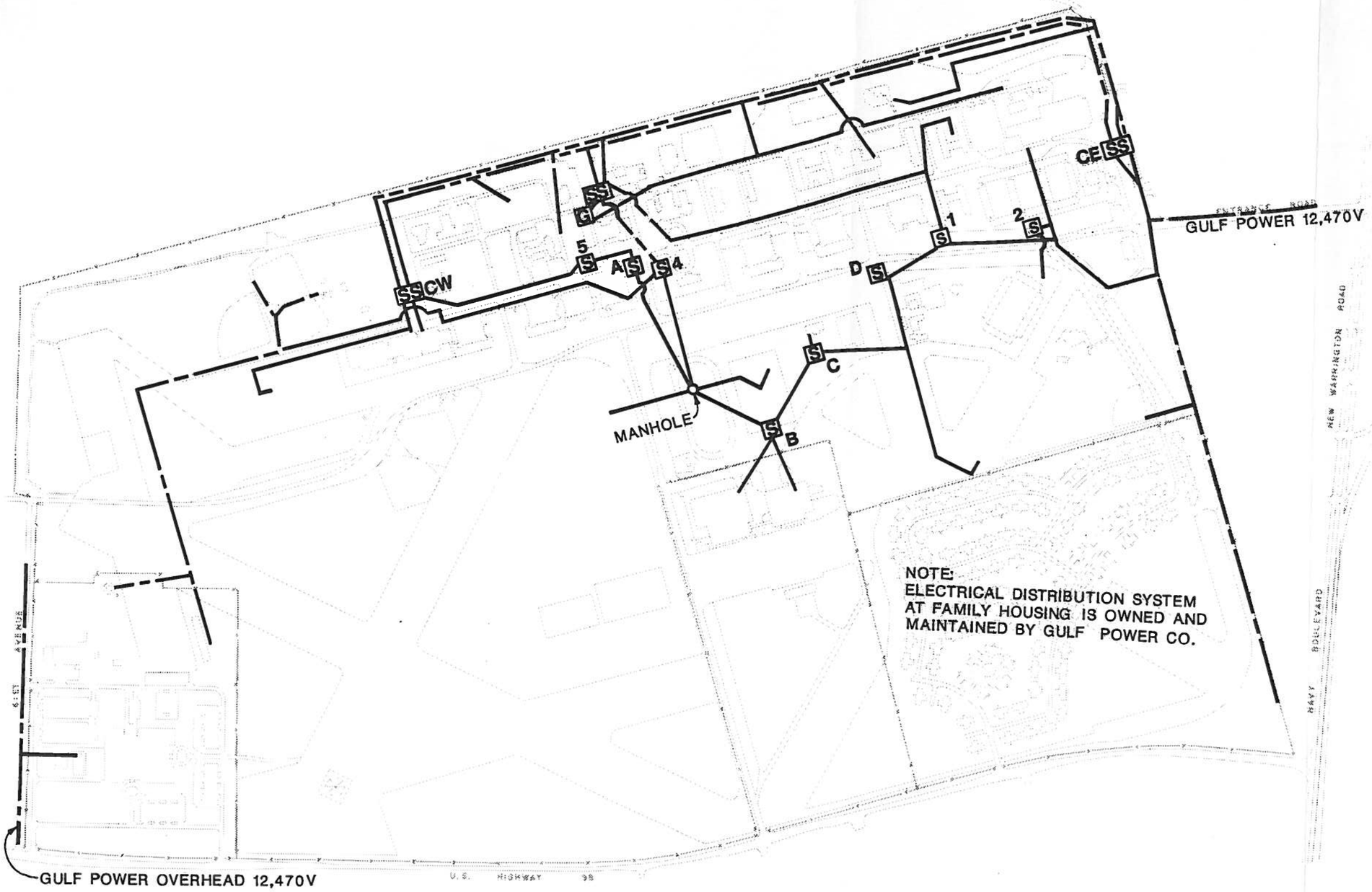
24" PIPE SIZE

200 0 200 400 600

SCALE IN FEET

FIGURE III-10

ELECTRICAL SYSTEM Corry Station



G EMERGENCY GENERATOR

S SWITCHING STATION

OVERHEAD

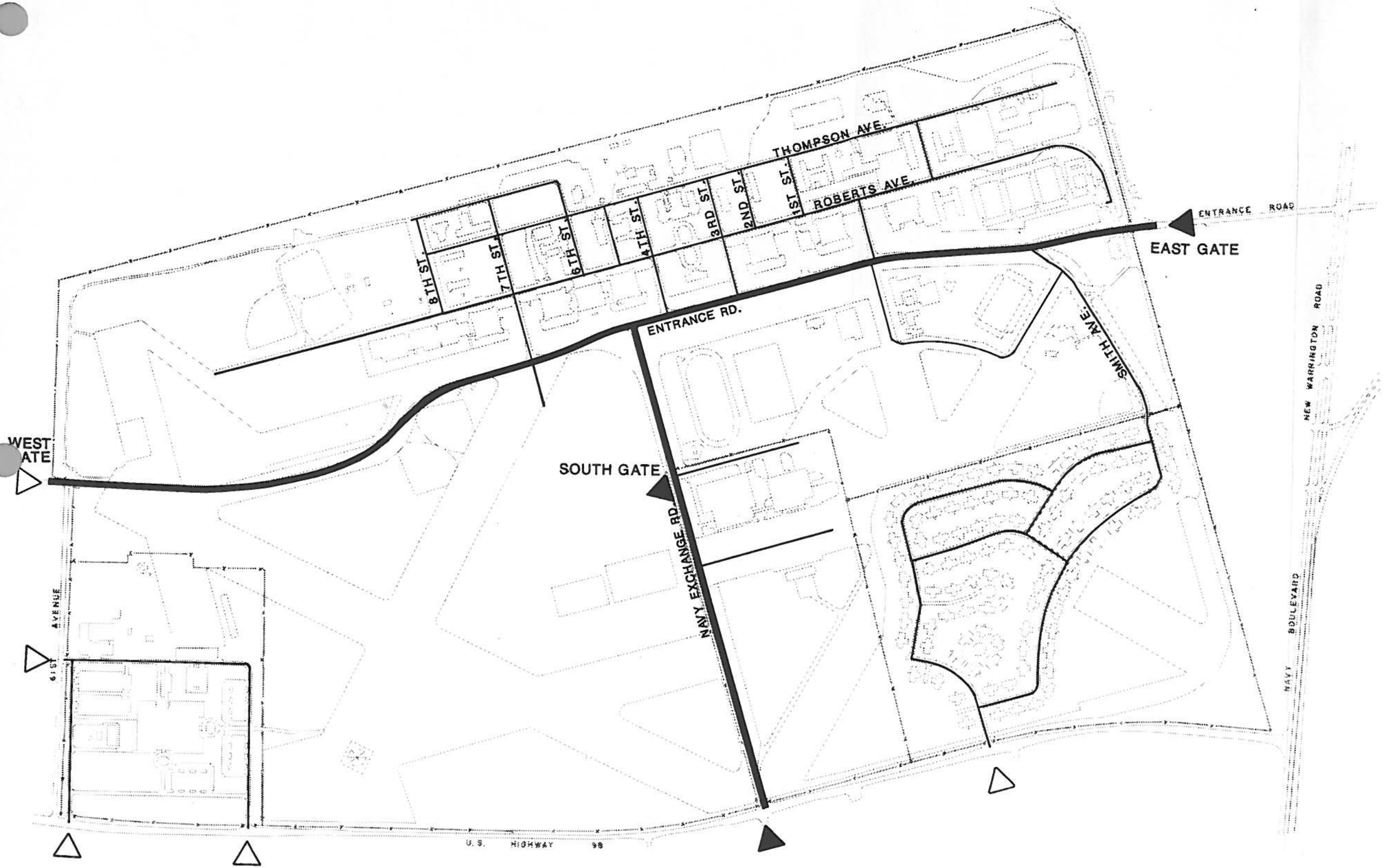
UNDERGROUND

SS SECTIONALIZING STATION

200 0 200 400 600
SCALE IN FEET

FIGURE III-11

EXISTING VEHICULAR CIRCULATION Corry Station

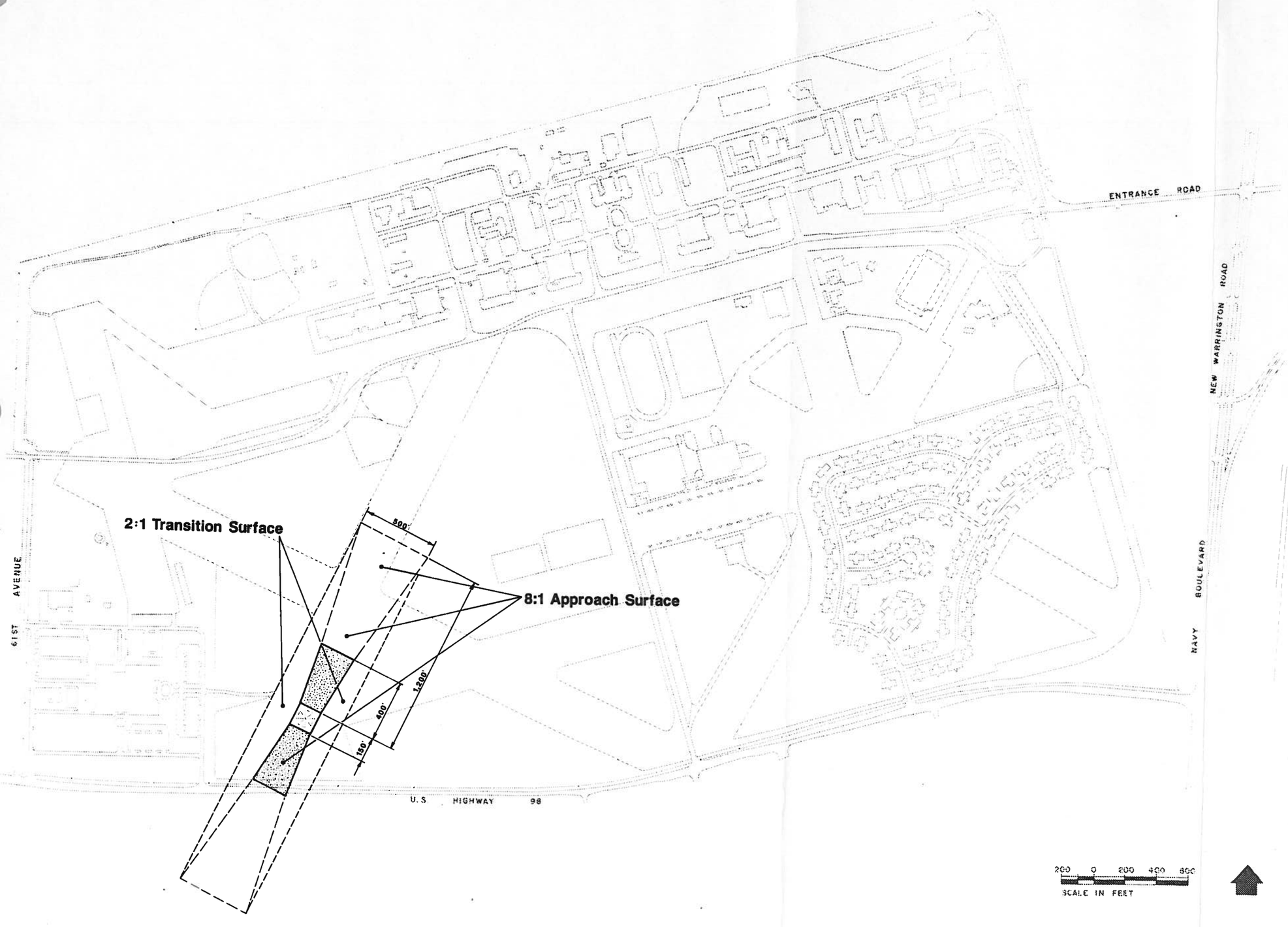


- PRIMARY ROAD
- SECONDARY ROAD
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- SECURITY FENCE

200 0 200 400 600
SCALE IN FEET

FIGURE III – 12

HELIPAD SAFETY CONSTRAINTS Corry Station



HELIPAD (VFR)

FIGURE III-13

NTTC is served by a Centrex Telephone system located in Building 504. The system at NTTC is a "system 85" with approximately 800 pairs connected to the AT&T system. The system onboard NTTC is maintained by NPWC with a contract to AT&T. The centrex has no emergency generator but does have an eight hour battery back up, which will allow the system to operate at full load during this period. The system does not extend into the undeveloped area of NTTC but is capable of such and will service the present and future needs of the master plan.

Fire Protection: Fire protection for NTTC Corry Station is considered adequate with the diesel standby pump at the water facility and the two existing elevated water storage tanks: 100,000 gallons and 150,000 gallons each.

Fuel Storage: A comprehensive plan for registration and evaluation of stationary petroleum storage facilities has been developed for NPWC facilities at NTTC Corry Station. Underground tanks are recommended for replacement with aboveground facilities or the addition of monitoring wells and overfill protection. Specific details are outlined in the Navy Public Works Center master plan.

Hazardous Materials Storage: Small amounts of hazardous material storage occurs on site at NTTC in paint lockers and at the potable water treatment plant, based on records maintained by NPWC. These storage sites have no impact on future expansion.

Emergency Power: Standby generators and standby diesel motors for generators are located at NTTC in Building 504 and maintained by NPWC. Emergency power capability is limited to crucial facilities, such as the water plant and heating plant. The Naval Electronics Warfare School has its own on-site emergency power generation for power outages and is not tied into the facilities in Building 504.

Transportation Systems: Corry Station, being a land-locked installation, is served by only two transportation systems, major highways and air. Air transportation is limited to helicopters utilizing one designated helipad which is located just to the east of the Naval Hospital. Helicopters also can land in the open recreation field just to the south of Building 501, which is the NTTC Administrative Building, but there is no designated helipad at this location.

U.S. Highway 98 along the southern boundary of Corry Station and State Road 295 (Navy Boulevard and New Warrington Road) just to the east of the base provides good motor vehicular access to NTTC. Automobiles and trucks are the primary means of transporting people and goods to and from Corry Station, though there is one local bus route that provides hourly service between the Navy Shopping Mall and other points in the Pensacola urban area.

Though rail service was once available to Corry Station via a spur line running along the north side of Entrance Road, the line has been abandoned. Consequently, Corry Station no longer has direct access for rail transportation

and the closest active rail line is now approximately one mile to the northeast of the station.

Roads and Circulation: Vehicular ingress and egress are considered to be adequate at Corry Station. Separate entrances are provided to the Naval Hospital and the family housing area, while three additional access points are provided to NTTC, one of which also serves the Navy Shopping Mall. Recent improvements to the east gate (NTTC main gate) have greatly enhanced the on-base traffic flow for the primary tenant command of Corry Station. (See Figure III-12) The off-base access road (Entrance Road) to NTTC's main gate, however, needs to be widened and re-surfaced. Entrance Road is currently only a two-lane local street which connects the NTTC main gate with New Warrington Road. The pavement surface is in poor condition and the roadway should be widened to accommodate four traffic lanes.

Of the three access points to NTTC, the east gate or main gate is open and manned 24 hours a day, seven days a week. The NTTC south gate via Navy Exchange Road is not open at night and the west gate, via 61st Avenue, is only open during peak traffic periods. With this gate system and an existing fence around the entire perimeter of its real property, NTTC is able to maintain adequate security and separation of its operations from the other, more non-operational, functional areas at Corry Station (i.e., Naval Hospital, Shopping Mall and family housing). Internal roads are available for access to each of these areas. However, openings (gates) in the boundary fence are either locked at all times or open and controlled only for certain periods.

Improvements to the NTTC on-base road system are desirable. As pointed out in the Base Exterior Architecture Plan (BEAP), the visual qualities and parking organization are poor in some cases. This primarily is a result of the transition of Corry Station from an air station, with runways and taxiways, to a classroom training facility without first removing the vast expanses of paved asphalt. Improvements to this visual impact are being made whenever possible in conjunction with new building construction projects, but a major road and parking enhancement project will be required in order to realize any significant improvement.

Security: On-base security is provided by fencing (both perimeter and between certain functional areas) and by Navy sentries posted at all three gates. The main gate is open 24 hours; the southern entrance is open from 0500-1800, with limited access on weekends; and the west entrance is open from 0600-1800 weekdays. DOD civilian guards are posted at fenced buildings.

Operational Constraints

In addition to natural and man-made constraints, on-base operations can cause restrictions to master planning which need to be recognized.

Airfield Safety: Although NTTC is no longer an air base, a helipad serving the Naval Hospital is located on the southwestern portion of the station. Its frequency of use is not enough to justify designation of an AICUZ

(Air Installation Compatible Use Zone), but structure heights and approach zones should be controlled in the vicinity, both on and off base, so as not to interfere with the helipad's safe operation. Family or troop housing should be located a safe distance from the helipad as well to ensure compatibility. (Figure III-13)

Explosives and Ordnance Hazards: Except for a small amount of small arms for on-base security, there are no explosives or major ordnance stored at the NTTC. Arms are stored in Buildings 501 and 505. When moved on base, the ordnance is transported to the west on Entrance Road from the main gate to 3rd Street North, then on 3rd Street to Roberts Avenue, then west on Roberts to the horseshoe driveway near Building 501, where it is parked in front of the steps to the north entrance. This path is reversed for off-base movement.

Electromagnetic Radiation: As part of the NTTC Security Net, there are radio transmitters on Buildings 501, 503 and 3701, plus mobile units, with a repeater on the Naval Hospital. The MARS/Emergency Net is housed in Buildings 523 and 3748. Because training activities use only simulated equipment and because little ammunition is on base, there are no restrictive areas associated with the Explosive Safety Quantity Distance (ESQD) or the Hazardous Electromagnetic Radiation to Ordnance (HERO) at NTTC.

Fuel Storage: Other than gasoline sufficient to serve the filling station and backup generators, and miscellaneous fuel oil tanks, there is insufficient fuel storage requirements for this function to be considered a development constraint to NTTC operations.

Hazardous Material Storage: There is no significant amount of hazardous material stored within the NTTC's jurisdiction at Corry Station.

Hazardous Waste Storage: No hazardous waste is stored at the NTTC's facilities at Corry Station.

Sanitary and Industrial Waste Treatment: No waste treatment facilities exist at Corry Station. All wastewaters are treated at the Escambia County Utility Authority (ECUA) Warrington Treatment Plant. That facility has been under a moratorium for several years, and can accept no new sources. As a result, several of the newer facilities at Corry Station could not connect to the sewer system and are on septic tank systems. This poses a contamination risk to the Navy potable water well field.

Several solutions have been developed to provide adequate treatment. ECUA is in the process of developing a force main system from the Warrington Plant to the Pensacola Main Street Plant. ECUA also investigated land disposal of the treated waste water at a site near NAS Pensacola's west gate. Public opinion blocked this solution. Public Works Center (PWC) Pensacola has developed a project to pump Corry Station's waste water through an abandoned water main to the PWC wastewater treatment plant at NAS Pensacola. This project is

undergoing in-house design at Southern Division Naval Facilities Engineering Command and construction is planned in FY 90.

With the increased loading from new facilities at Corry Station, several of the sewer collection system trunk lines are hydraulically overloaded. The entire system should undergo an analysis to determine requirements before additional major construction is undertaken.

At the present time, the sewage system presents serious constraints to Corry Station development.

Small Arms Range: NTTC does not have a small arms range.

Landfills: There are no landfills at Corry Station.

Site Development Potential

There is land available within the boundaries of NTTC Corry Station for future expansion that will provide the desired spatial configurations of new structures which will promote a campus like atmosphere and utilize the existing pine trees liberally as buffers and as an enhancement to offsetting architectural disparities.

Natural constraints to further development at the NTTC Corry Station are extremely minimal and all undeveloped land may be considered to be prime buildable land.

- There is a need to conserve the managed forested areas to enhance the quality of life for base residents, visitors and employees and to provide habitat for the resident birds, squirrels, raccoons, rabbits, etc. Wise use of the forested areas also will assist in implementation of the 1983 BEAP. Also incorporating and utilizing the forested areas with minimum clear cutting during future land development will minimize the inpact of storm water run off to Jackson Creek and Bayou Chico by providing retention and filtration of storm water.

- New buildings should be built to withstand hurricane wind speeds to ensure maximum building life.

- Though the potential for local earthquakes is minimal a cost and benefit analysis should be considered to weigh earthquake risk when siting highly sensitive activities.

Although NTTC Corry Station has no known Installation Restoration (IR) sites, historic, or archaeological sites within its jurisdiction, there are four basic constraints to further development at the NTTC imposed by the man-made environment. However, none of these obstacles is a major impediment, given sufficient capital and planning.

- The helipad's existence affects specific siting decisions regarding certain types of structures and land uses to the extent they could encroach on designated approach and departure zones.

- The linear development of the NTTC caused by the previous mission as a Naval air station complicates its evolution to a training "campus."

- The relatively high amounts of substandard and inadequate space for several tenant activities may necessitate capital expenditures for rehabilitation of existing buildings before capital can be made available for facility expansion.

- The lack of infrastructure services in the undeveloped areas of NTTC will have to be included in the cost of new development. The two areas of primary concern with the infrastructure services will be the sanitary sewerage and storm drainage systems and the related constraints to development which are addressed on pages III-13 and III-14. Additional roads and utility extensions are required and will have to be supplied at the time new building construction is planned.

Specific Encroachment Issues

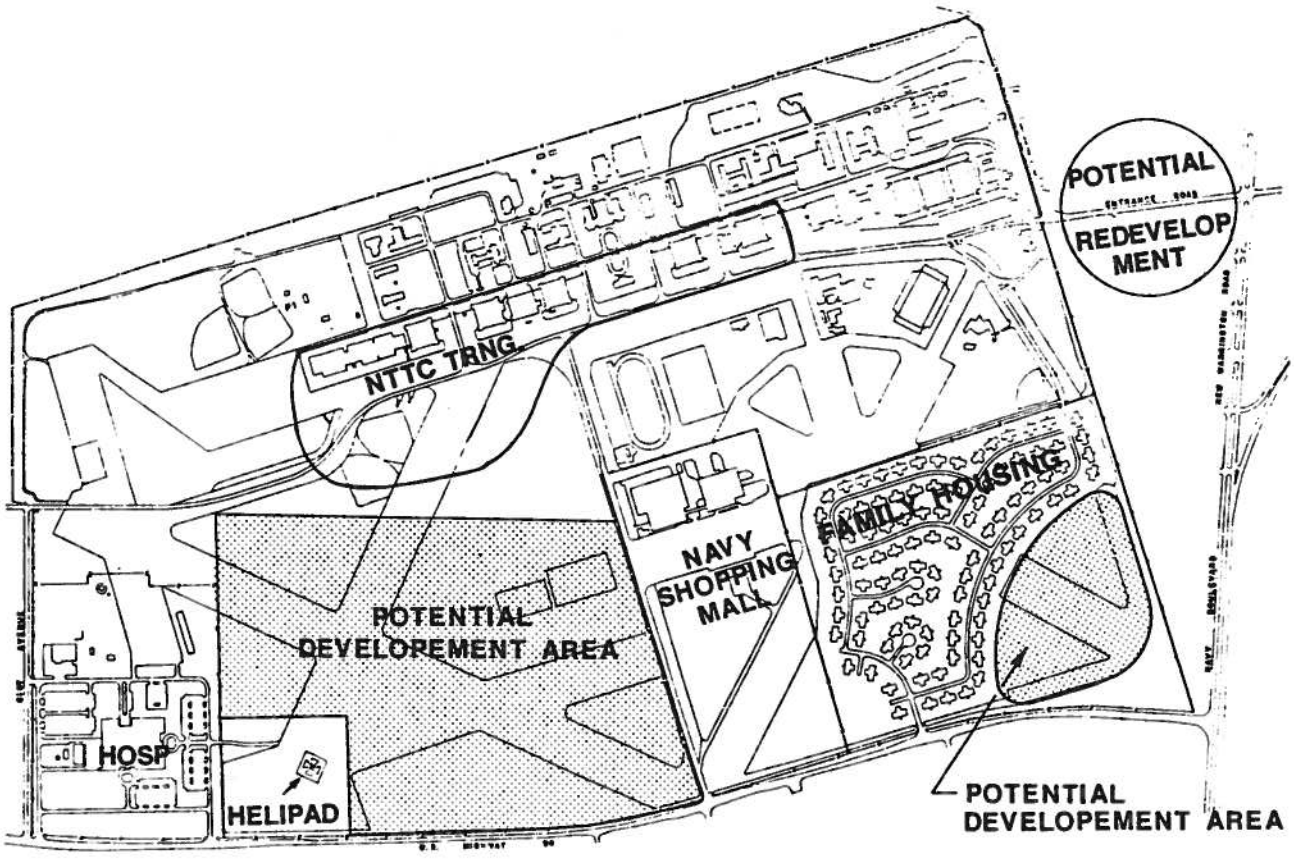
Corry Station is situated in the midst of an established urban area and there is little opportunity for adjusting existing land development patterns along the edge of the station. Consequently, future development and operation of facilities on Corry Station must take into account the surrounding neighborhood character.

Pensacola Junior College provides an acceptable and compatible land use to the south of Corry Station, and there is a reasonable separation between Naval facilities and the civilian community to the east and west. However, along the north edge of Corry Station, where most of the NTTC facilities are concentrated, there is very little separation between the Navy activities and the adjacent residential development. To the extent possible, a reasonable setback from the northern station boundary should be maintained for all new facilities constructed in this area of Corry Station.

There are two potential development areas (shown on the following sketch) at Corry Station, the land area between the Naval Hospital and the Navy Shopping Mall and the land area at the southeast corner of Corry Station that is contiguous to family housing. These areas could become a major encroachment issue if this land is declared excess and converted to some form of non-military use. Presently, most of this land area, surrounding the abandoned runways, is planted in pine stands and is managed under the Natural Resources Management Plan; some cleared areas are playing fields which are part of the morale and welfare program managed by the Corry Station Recreation Department. This is the only land available that does not have AICUZ constraints to housing development in the Pensacola Complex and

is in close proximity to NAS Pensacola. It would not be prudent to excess land that could provide future sites to support the housing needs of lower enlisted grades of military personnel within the Pensacola Naval Complex, a requirement not being met by the civilian community. Also, as indicated on the following sketch, the larger of the two Potential Development Areas is an integral part of Corry Station and presently provides a good buffer for NTTC's sensitive training facilities to the north and the Naval Hospital helipad to the west. It is imperative that this area be retained under Navy ownership, not only for maintaining the geographic continuity of Corry Station, but also for preventing any subsequent land development that would be in conflict with NTTC's mission and security requirements.

As stated previously, the land area immediately outside the NTTC main gate is presently in transition from an older, single family residential area to a proposed higher density residential and office development zoning classification. Some portion of this area is presently vacant land, while other sections are in need of redevelopment and upgrading. A cooperative effort must be maintained between the Navy and the local community to ensure that the ultimate development of this area is in the best interests of both agencies.



REQUIREMENTS ANALYSIS

In Chapter III, the extent and condition of existing NTTC facilities were determined and their development potential analyzed by considering physical and operational assets and constraints. This chapter builds on the previous analysis to more specifically define future facility requirements. These facility requirements lead to a determination of the minimum land area required to support the Command's assigned mission

Methodology

The extent and condition of existing facilities described in Chapter III, were quantified and analyzed using several sources including Engineering Evaluation reports, host and tenant activity questionnaire, updated Basic Facility Requirements (BFR) documents, the 1983 Base Exterior Architecture Plan (BEAP) and other miscellaneous planning documents. A comparison of basic facility requirements with existing adequate facilities highlighted appropriate facility surpluses and deficiencies. Those facilities with excess square footage or with no specified requirements at NTTC Corry Station were determined to be surplus. Those facilities with less square footage then required, or with substandard or inadequate existing space, were classified as deficient.

Next, the minimum land area needed to support required facilities and other planning objectives was calculated. This was done by breaking each functional land use category into specific components, including building footprint area, required parking area and allowance for roadways, open space and future expansion. Some functional categories, such as recreation, which have non-structural facility requirements were also included in the calculation of land area requirements.

Finally, the area requirements were consolidated and compared to available acreage to ensure that the requirements did not exceed the capacity of Corry Station to accommodate them. Allowance was made for buffers (for security and aesthetics), natural resource management areas and areas suitable for future, as-yet-unidentified mission changes.

This process established a basis for evaluating spatial relationships among the functions, developing a preferred long-range land use plan, and creating a capital improvements plan to help achieve the land use plan. These steps are described in more detail in Chapter V.

Command Structure

The command structure for the Naval Technical Training Center Corry Station is shown in Figure IV-1. In addition to the host activity (NTTC), there are 26 tenant activities. These are listed in Table III-1 in Chapter III.

Present and Future Missions

Currently the NTTC's mission is to administer those schools, assigned to it by the Chief of Naval Education and Training, which train officers and enlisted personnel of the Department of the Navy and personnel of other services and agencies in cryptology, electronic warfare, photography and related subjects.

Tenant missions are as follow:

1. Naval Reserve Security Group Northwest 110 trains reserve cryptologic technicians.

2. Company K, Marine Support Battalion provides local support for Marine Corps personnel receiving training at NTTC.

3. U.S. Army Intelligence School, Fort Devans, Pensacola Detachment trains intelligence soldiers in non-Morse intercept skills; provides Senior Non Commissioned Officer (NCO) additional skill identifier (ASI) training; provides command and control, Uniform Code of Military Justice (UCMJ), administrative support and non-technical training to all assigned and attached soldiers; and provides the Army fair-share of instructors for non-Morse training under the Executive Agent training concept.

4. USAF, 3482nd Technical Training Squadron provides administrative support and command functions for all Air Force personnel assigned to NTTC Corry Station.

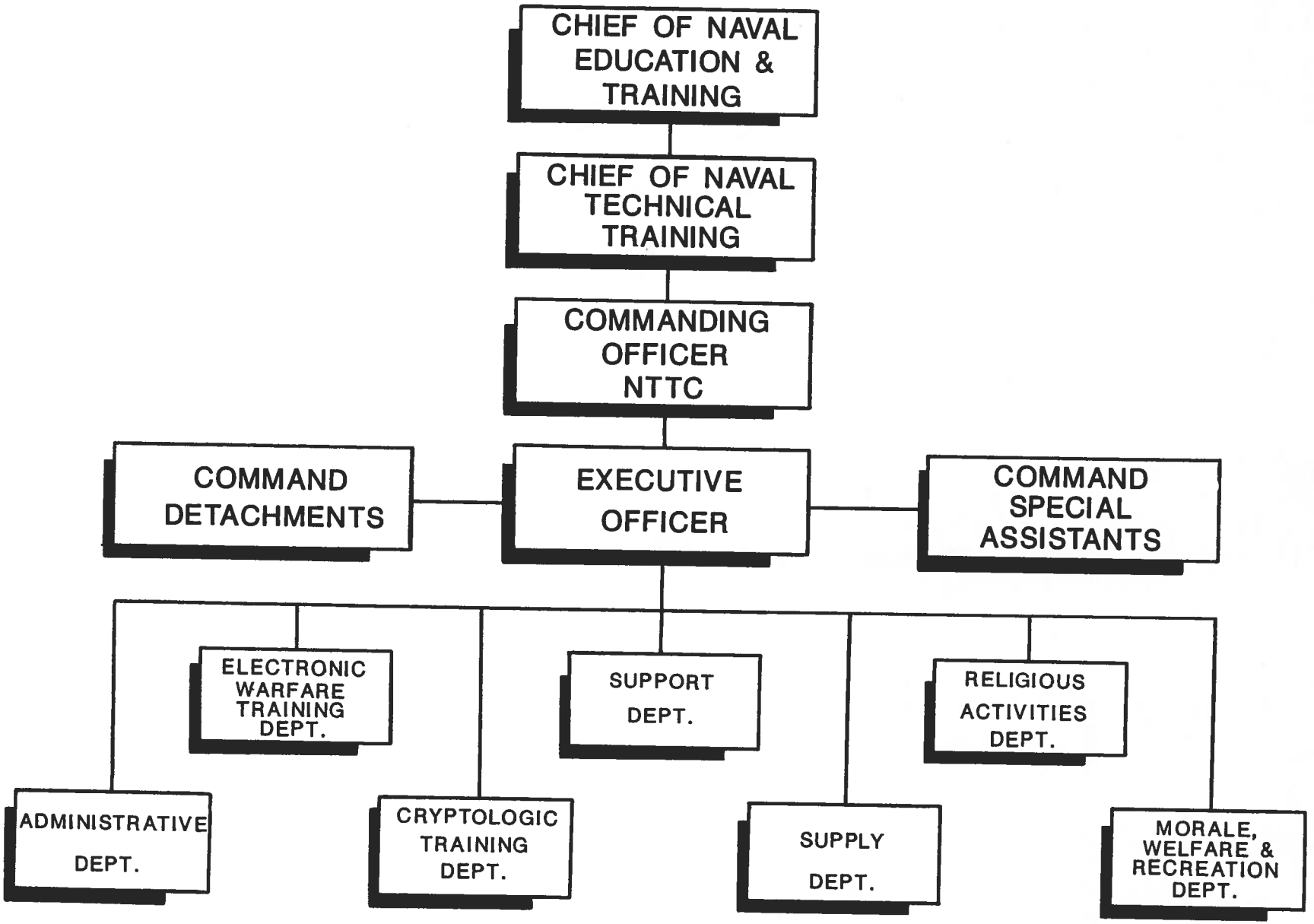
5. Personnel Support Activity Detachment provides consolidated pay and personnel services to officer and enlisted personnel and their dependents; passenger transportation service; other functions and tasks as directed, within an assigned geographic area; and processes all civilian travel claims for supported civilian activities.

6. Warrington National Bank branch provides convenient banking services for personnel at NTTC.

7. Pen-Air Federal Credit Union branch provides cooperative savings and loan services for military personnel, their dependents and other personnel as permitted in the bylaws of the credit union.

8. Scheduled Airlines Ticket Office serves military and civilian personnel for government and leisure travel.

9. Defense Investigative Service Office conducts personnel security investigations for all military and civilians having access to classified Department of Defense information and/or material.



COMMAND STRUCTURE,
Corry Station

FIGURE IV-1

10. Naval Security Group Field Office assists the Commander Naval Security Group (COMNAVSECGRU) in the selection and review of persons requiring or granted access to Sensitive Compartmented Information; provides personnel security assistance to the Commanding Officer NTTC and other designated commands; and provides specified services necessary for the accomplishment of the Naval Security Group Field Office (NSGFO) Pensacola mission in coordination with the functions of NTTC Corry Station.

11. U.S. Post Office provides retail postal services for Corry Station.

12. Management Information and Instructional Systems Activity Unit plans, designs, develops, implements and maintains the Naval Training Information System (NAVTIS); acts as System Manager for designated subsystems of NAVTIS; provides functional analysis support to present and prospective NAVTIS system managers and other Naval Education Training Command (NAVEDTRACOM) managers; develops Automated Information System (AIS) Life Cycle Management (LCM) proposals for NAVEDTRACOM; advises the NAVTIS Program Director on Automatic Data Processing (ADP) management policy; provides an annual architecture plan for the NAVTIS Program Director; provides ADP support to technical training activities and Instructional Program Development Centers; and performs such other functions as directed.

13. Fire Station Engine Company 4, Reserve 5 provides fire suppression of buildings, rescue of personnel, and fire prevention for Corry, Corry Housing, Lexington Terrace and the Naval Hospital.

14. Navy Campus for Achievement manages and delivers all Navy Campus-sponsored off-duty educational programs and associated services to active duty personnel aboard NTTC and the Naval Hospital.

15. Naval Electronic Systems Engineering Center, Charleston represents NAVELEXCOM Charleston in the execution of electronic material and technical support for activities in the Pensacola area.

16. Naval Electronic Systems Security Engineering Center, Washington, D.C. provides engineering assistance on NAVSECGRU Bullseye Systems.

17. Training Development Unit designs and develops curriculum, as directed, for selected training courses at the NTTC Corry Station, Naval Training Center Orlando and Navy Diving and Salvage Center Panama City.

18. Pensacola Boys Base provides overall treatment for all youth committed to the Florida Department Health and Rehabilitative

Services (HRS) and subsequently placed in a residential community-based delinquency program.

19. Naval Investigative Service provides investigative and counterintelligence support to the Navy command, tenant commands, Saufley Field and Corry Housing.

20. Naval Aerospace and Regional Medical Center Branch Clinic provides outpatient medical care to active duty personnel stationed at Corry Station and Saufley Field.

21. Navy Exchange Complex Activity responds to authorized patrons by providing goods and services at a savings and for convenience in modern and well-maintained facilities; maintains the financial soundness of the system; and provides a reliable source of funds for morale, welfare and recreation activities.

22. Naval Education and Training Program Development Center, Saufley Detachment (Audiovisual Support), now NETPMSA, provides graphic and photographic support for development and production of audiovisual materials utilized in support of naval education and training, combat readiness, intelligence, criminal investigation, communications security, research and development, test and evaluation and medical and dental commands located onboard NTTC Corry.

23. Resident Officer in Charge of Construction oversees government contracts to see that all specifications and guidelines are followed on different job sites.

24. Naval Training Systems Center, Regional Office, Atlantic, Pensacola Field Engineering Division provides life cycle logistic support to all cognizance symbol Z "O" training devices located at NTTC Corry Station. Support includes technical assistance, modification responsibility, configuration control, facilities planning assistance, retraining of maintenance personnel for devices not supported under contract acquisition assistance, contractor monitoring for modifications, command liaison and other duties and assignments as requested or required.

25. Family Services Center provides assistance to base personnel and dependents including Red Cross family service, Navy relief, human resources, drug and alcohol counseling, and ombudsman.

26. Navy Regional Dental Center Branch Clinic provides dental care to all active military members aboard NTTC Corry Station.

27. Naval Security Group Detachment, Pensacola provides computer software support to Naval Security Group Activity field elements.

Some change in NTTC mission is anticipated during the next five years. Although Cryptologic Morse training will be relocated to Fort Devans, Massachusetts, some growth in electronic warfare and cryptologic training is expected. Opticalman and Instrumentman training will be relocated from Naval Training Center (NTC) Great Lakes to NTTC Corry Station. The Cryptologic System Support Activity will be a large-size new tenant.

Personnel Loading

Current and projected (FY 1992) personnel loading at the NTTC Corry Station is shown in Table IV-1. The civilian count includes appropriated and non-appropriated fund employees, tenant, contract and others. The student count was increased by 15 percent over actual count to adjust for student holds and lost time.

TABLE IV-1: CURRENT AND PROJECTED PERSONNEL LOADING, NTTC CORRY STATION

Personnel Loading	Military		Civilians		Students	
	Number	% Increase	Number	% Increase	Number	% Increase
Current (1986)	1,188	---	607	---	1,903	---
Projected (FY 1992)	1,346	13.3	712	17.3	2,474	30.0

Source: Base Loading Report and
NTTC Host Activity Questionnaire, 1986

The expected overall increase in personnel loading is 23 percent.

Facility Requirements

This section identifies building and other facility requirements by functional area and then establishes the minimum land area needed to support them, to give an overall picture of NTTC facility requirements.

Buildings

In addition to knowing how much building area a function uses and what condition that space is in, as described in Chapter III, it also is important to know whether there is too much or not enough adequate space to meet present

needs as a basis for space reallocation, repair or capital investment. Thus, surpluses and deficiencies should be considered. The most precise information about surpluses and deficiencies of specific category codes is found in the NTTC Engineering Evaluation, 1986.

To develop a generalized picture of surpluses and deficiencies, individual category codes have been grouped by function in Table IV-2. Each function's total space requirement is then listed, along with the amount of surplus and the amount of deficiency. Amounts are in square feet, unless otherwise noted. Refer to Table III-3 for existing amounts of building space.

TABLE IV-2
Surplus and Deficient Facilities
NTTC Corry Station, 1986

Category	(A) Requirement	(B) Adequate	(C) Surplus	(D) Deficiency
Operations	7,376	5,104	---	2,272
Training	530,851	339,943	---	190,908
Maintenance	36,584	30,136	---	6,448
Supply	29,490	29,490	---	0
Medical	18,368	15,346	---	3,022
Administration	37,219	9,884	---	27,335
Troop Housing *	4,545	3,242	---	1,303
Community Facilities	95,697	53,030	---	42,667
Recreation	119,029	42,070	---	76,959

Source: NTTC Engineering Evaluation, 1986
* Measured in "persons"; all others in square feet.

Programming, scheduling and siting appropriate facilities to resolve the space deficiencies noted in Table IV-2 are primary objectives of the NTTC updated master plan. Various military construction projects have already been identified to meet specific facility requirements. Four projects are currently under construction; others are in various stages of planning or preliminary design. The following is a summary of the more immediate projects - which when completed - will go a long ways towards reducing current deficiencies. A more complete listing of both immediate and long-range improvement projects is contained in Chapter IX (Capital Improvements Plan).

Training: The functional land use category with the largest current deficiency in building space is training. Projects currently under construction or proposed to be constructed within the next five years include:

P-108*	Crypto Training Building	14,192 sq.ft.
P-109*	Applied Instruction Building	53,900 sq.ft.
P-134	Addition and Modernization of Building 512	20,098 sq.ft.
P-133	Addition and Modernization of Building 511	18,350 sq.ft.

* Construction in Progress (P-108 is FY88 and P-109 is FY87, therefore not listed in Table IX-1.

Recreation: The next largest area of deficiencies relates to recreational type facilities. New building construction projects identified for this functional classification include:

P-110	Gymnasium	21,923 sq.ft.
P-129	Boathouse and Recreation Equipment Distribution Facility	12,100 sq.ft.

In addition, four new softball playing fields (P-128) are to be constructed just to the east of Navy Exchange Road and south of Entrance Road.

Community Facilities: This functional land use category includes a wide range of community and troop support type facilities. For the purpose of this analysis this particular functional category is intended to include those type of activities normally found in a "neighborhood shopping center." Projects which have been identified for this category include:

P-107	Library and Educational Services	12,535 sq.ft.
P-106	Multi-Purpose Building	6,700 sq.ft.
P-113*	Bowling Center Complex	29,092 sq.ft.
P-116	Child Care Center	9,200 sq.ft.
P-135	Religious Education Center	5,880 sq.ft.

* Under construction (FY87 project not listed in Table IX-1)

Obviously, projects already mentioned under "Recreation" could be considered as "Community Facility" projects as well. Regardless of the classification used, the total additional space represented by the above projects generally meets the total deficiencies identified for these two functional categories in Table IV-2.

Other projects currently in the NTTC military construction program which respond to existing facility deficiencies include:

Administration:	P-099	Administration Building Modernization	49,132 sq.ft.
	P-114	Police Station	2,603 sq.ft.
Operations:	P-036*	Computer Programming Operator Facility	67,200 sq.ft.

* Under construction (FY88 project not listed in Table IX-1)

MILCON Project P-036 is sponsored by a Command other than the Naval Technical Training Center; consequently, the space requirements for this particular facility was not included in the calculations used to generate Table IV-2. Of the individual military construction projects included in the above summary, Projects P-109, P-113, and P-108 are under construction. Because these new facilities are not officially completed and available for occupancy at the time of this study, their respective building floor areas are not incorporated in the inventory of existing assets. (See Table III-3.)

Minimum Land Area

The analysis of minimum land area requirements is a process intended to estimate the minimum land area in acres that is required to accommodate the buildings, parking areas, roadways and open space within each functional land use category. A summary of these calculation factors follows:

1. Building Gross Floor Area: Includes requirements from all category codes for a particular activity drawn from the Facilities Requirements Plan Summary prepared.

2. Building Footprint Area: This figure is derived from the Building Gross Floor Area and reflects the fact that multi-story buildings require less land area than single-story buildings. For each major activity node and land use category an assumption is made regarding the number of floors in the buildings. When the number of floors varies from building to building the assumption reflects the perceived mix through the use of an intermediate value (i.e., 1.5). The Building Gross Floor Area is divided by the assumed number of floors to determine the Building Footprint Area.

3. Lot Coverage Multiplier: The lot coverage multiplier estimates the open space requirement surrounding building areas. An appropriate level of lot coverage ranges from 25 to 40 percent depending on type of land use. The corresponding range for the lot coverage multiplier is 2.5 for 40 percent lot coverage to 4.0 for 25 percent lot coverage. The Building Footprint Area is multiplied by the Lot Coverage Multiplier to derive the lot area.

   In some cases lot coverage multipliers may be applied to nonstructural facilities to address open space requirements associated with these facilities. The lot coverage multiplier applied to nonstructural facilities may not fall within the range of values outlined above.

4. Required Parking Area: Estimating the required parking area involves estimating the number of parking spaces needed. The required number of parking spaces is estimated using criteria from NAVFAC P-80 Section 852-10. When criteria for a particular land use or facility type are not specified, the Institute of Transportation

Engineers Parking Generation standards are used as an alternative. An allowance of 400 square feet per parking space is used in the calculations of area requirements. This allowance includes 315 square feet for parking space and circulation specified in NAVFAC P-80 Section 852-10 and 85 square feet of open space. The required parking area is added to the building footprint area and the open space requirement to derive the net site area.

5. Net Site Area: The net site area is the sum of the lot area, required parking area, and any applicable non-structural facilities.

6. Allowance for Roadways: The allowance for roadways used in the calculation of minimum land area requirements is 15 percent of net site area.

7. Allowance for Future Expansion: This factor is included to assure adequate land area within a functionally related activity node or land use category for growth beyond the FY 92 time horizon of this master plan. The allowance is based on a subjective assessment of growth requirements for each particular activity. The factor is expressed as a percentage of net site area.

Table IV-3 summarizes the number of acres needed to accommodate each functional land use category. It should be emphasized that these are minimum requirements under ideal conditions. Actual land area requirements are influenced by various development constraints, previous facility siting decisions, and existing roadways and utility infrastructure.

TABLE IV-3: MINIMUM LAND AREA REQUIRED: NTTC SUMMARY

FUNCTION	ACRES
Operations	1
Training	35
Maintenance	4
Supply	3
Medical	3
Administration	4
Troop Housing	40
Community Facilities	15
Recreation	95
TOTAL	**200 ACRES**

Source: Kimley-Horn Pensacola Naval Complex Master Plan, Concept Summary, 1987

Basically, about 200 acres are needed to meet projected facility requirements for NTTC Corry Station. This leaves approximately 130 acres of undeveloped land presently under NTTC's jurisdiction, some of which is presently under the scrutiny of General Service Administration (GSA) audit for excessing. Arguments for the Navy retaining this land were clearly expressed previously in Chapter III.

Conclusion

The overall increase in personnel loading anticipated during the next five years is about 23 percent, which translates to a space deficiency (requirements minus assets) of over 350,000 SF (See Table IV-2). Given the fact that 34 percent of existing space is either substandard or inadequate, as shown in Table III-3, the need becomes apparent for significant new construction and considerable rehabilitation of existing facilities to meet minimum requirements for the short-term future. Given Corry Station's long history and excellent location in the Pensacola region relative to other Naval installations, the master plan gives appropriate consideration to maximize the life of existing and planned facilities for an indefinite period. Clearly, undeveloped land under the jurisdiction of the NTTC will be needed over time to accommodate changing requirements and to ensure the enhancement of the quality of life for Corry Station personnel.

DEVELOPMENT OF CONCEPTS

Once facility requirements are quantified and associated minimum land area requirements identified, as they were in Chapter IV, locational relationships may be explored. To promote efficient transportation and communication among land uses, and to further other planning objectives, certain land uses should be located near or next to each other, while other functions need not or should not be. A number of different land use arrangements are possible, constrained only by natural or man-made factors or funding.

In this chapter, an "ideal" functional relationship is identified; that is, one unconstrained by any limiting factors. The ideal relationship is then compared to the existing, or "as-built," relationship. Next, three concepts are presented as compromises between the existing and ideal relationships, each emphasizing a different "core" function. Finally, a preferred concept emerges, forming the basis of the proposed land use plan presented in the next chapter.

Corry Station houses four primary functions: the NTTC, the Naval Hospital, the Navy Shopping Mall and Corry Family Housing. The NTTC Activity Master Plan addresses land use arrangements among the NTTC, the mall and family housing. Although the Naval Hospital influences these arrangements a separate activity master plan has been prepared for the hospital.

The specific functional land uses examined in this chapter include those previously analyzed (i.e., operations, medical, supply, public works utilities, administration, training, troop housing, community facilities and recreation) plus family housing. Currently, there are 200 units of family housing at Corry Station managed by the Public Works Center at NAS Pensacola. Although they are not actually part of the NTTC, they affect other land use arrangements due to their location, size and needs.

Ideal Functional Relationship

In the introduction of the NTTC Activity Master Plan, several objectives were set forth. Those with locational implications are repeated here:

1. Military requirements take precedence over ancillary or support functions.

2. Traditional use areas should be retained.

3. Hazardous facilities should be separated from populated areas.

4. Security for sensitive functions and control of access should be maintained.

5. Adequate, efficient and economical utility support should be maintained.

6. On-base land uses should be compatible with off-base land uses.

7. Consistency with previous master plans and related plans should be maintained.

8. Flexibility to respond to unforeseen long-range needs should be provided.

9. Noise-sensitive land uses should be prohibited from high noise exposure areas.

10. Natural resource areas should be preserved and maintained.

11. Traffic flow entering and leaving the base during peak hours should be improved.

12. Visitor traffic should be separated from military and employee traffic.

In addition to these objectives, there are a few other locational objectives which are basic planning tenets.

1. The NTTC's basic training mission should be housed in a campus-like setting.

2. Housing for students (troop housing) should be convenient to those functions upon which the students depend.

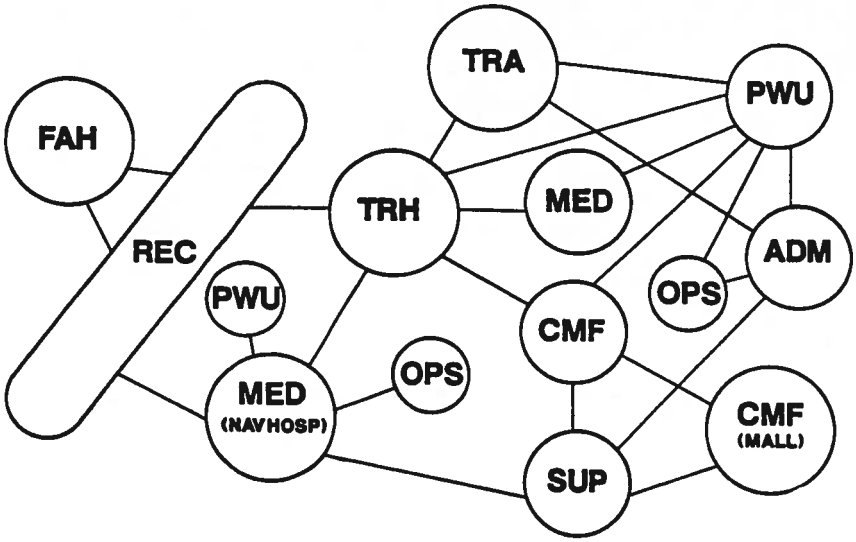
3. Administrative support activities should be located close to students and training, as well as to one or more base entrances in order to intercept visitors.

4. Community facilities and recreation should be located close to troop housing and, as appropriate, to family housing.

An ideal functional relationship, then, would maximize each of these objectives to the extent possible. Figure V-1 illustrates such a potentially ideal relationship. It emphasizes training and troop housing.

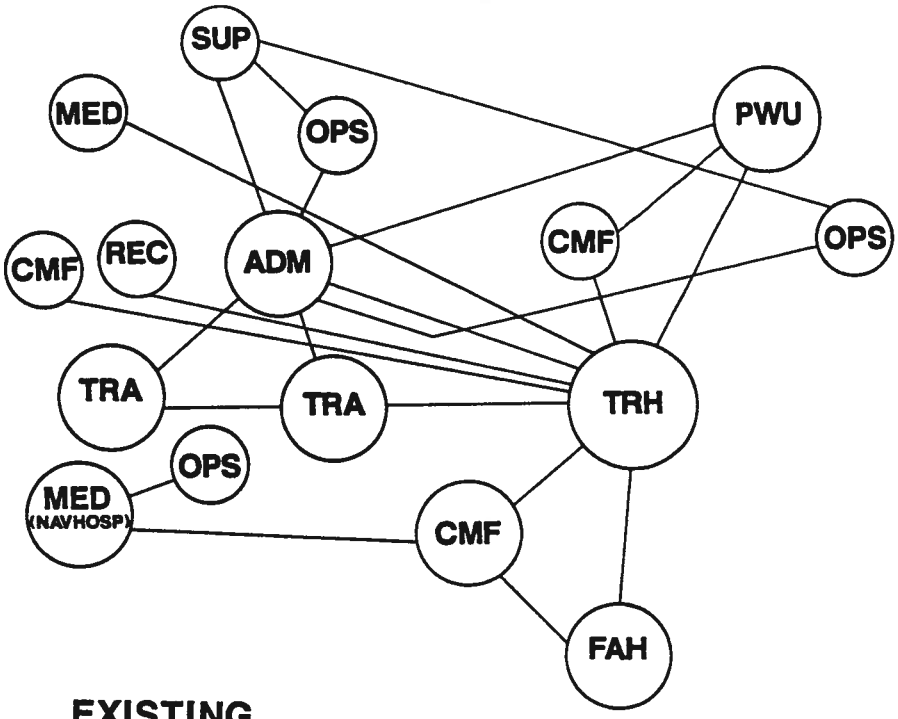
Comparison Between Ideal and Existing Functional Relationships

The ideal relationship figure can be compared to existing functional relationships by looking at Figure V-1. It quickly becomes apparent that some existing functions are fragmented, contributing to inefficient service delivery and administration, or are not located in proximity to supporting



IDEAL

ADM – ADMINISTRATION	OPS – OPERATIONS
CMF – COMMUNITY FACILITIES	REC – RECREATION
FAH – FAMILY HOUSING	SUP – SUPPLY
PWU – PUBLIC WORKS UTILITIES	TRA – TRAINING
MED – MEDICAL	TRH – TROOP HOUSING



EXISTING

IDEAL & EXISTING FUNCTIONAL RELATIONSHIPS
Corry Station

FIGURE V-1

functions, complicating service delivery, communications and transportation. In addition to the pattern of existing development, there are other existing factors which inhibit realization of the ideal functional relationship.

1. The existing linear development pattern resulted from Corry Station's original mission as an air base, rather than as a training center.

2. Most facilities built prior to the NTTC's occupancy of Corry Station were of permanent construction and involved significant capital investment.

3. The majority of NTTC facilities are considered to be adequate; 6.9 percent of facilities are inadequate and 27.5 percent are substandard.

4. No major changes in mission or requirements are expected in the foreseeable future, so no completely new functions are anticipated.

5. Severe cutbacks in funding preclude removal of adequate facilities and construction of new facilities only for purposes of convenience or realignment. Rehabilitation of existing facilities, even those classified as inadequate, is more likely to be a priority than new construction.

Development Concepts

Three different development concepts were investigated, each maximizing to the extent practicable the various planning objectives, while recognizing the constraints described in this chapter. Concept A emphasized the administration function, Concept B focused on training and troop housing, and Concept C emphasized family housing. Each concept retained the existing relationship of present primary activities.

Concept A

Concept A emphasizes administration, a function which affects most of the other functions. Figure V-2 shows the relative strength or importance of functional relationships as well as their generalized location in relation to each other. Concept A suggests two nodes of troop housing and training, supported by shared, associated facilities. A secondary node of family housing and separate, supporting community facilities and recreation also are established.

Advantages: The administrative core is centralized, to be accessible to all other functions. Recreation facilities are located close to users (troop and family housing). Family housing is self-contained, with relatively separate community facilities. Supply is at the periphery so that service traffic does not have to penetrate the base.

Disadvantages: Community facilities are located rather inconveniently to the major node of troop housing. Training facilities and troop housing are somewhat decentralized. The medical and dental functions are remote from users.

Concept B

Concept B emphasizes the strongly related functions of troop housing and training, the primary focus of the NTTC. Administration is more dispersed than under Concept A, and family housing is somewhat expanded. See Figure V-2.

Advantages: Training is located more centrally to troop housing. Recreation is better located in relation to all housing. Increased housing likely would ensure better maintenance of tree coverage than other functions.

Disadvantages: Although the primary location of administration is centralized, it is not readily accessible from the southern station boundary. Community facilities are not conveniently located to one major node of troop housing. The northern supply node requires service traffic to intermingle with other base traffic.

Concept C

Concept C, illustrated in Figure V-2, emphasizes family housing. This concept accommodates the possible relocation of family housing from NAS Pensacola.

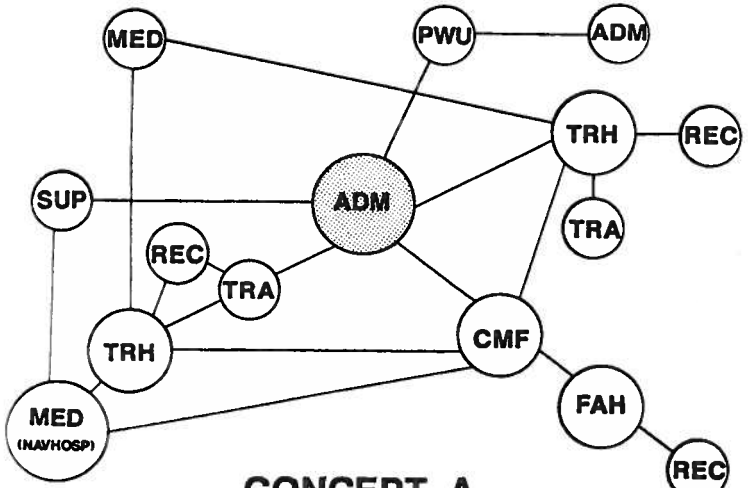
Advantages: The expansion of family housing is more likely to maintain more tree coverage than most other land uses, providing a better buffer along Corry's south boundary. Military functions are more clearly separated from non-military under this concept. Recreation is located near troop housing. Community facilities are fairly centrally located to both troop and family housing.

Disadvantages: Should the NTTC's mission change or expand significantly in the future, increased military usage, if possible, would be incompatible with family housing. Few recreational facilities are available to family housing. Administration is somewhat decentralized. Training is somewhat remote from troop housing.

Proposed Development Concept

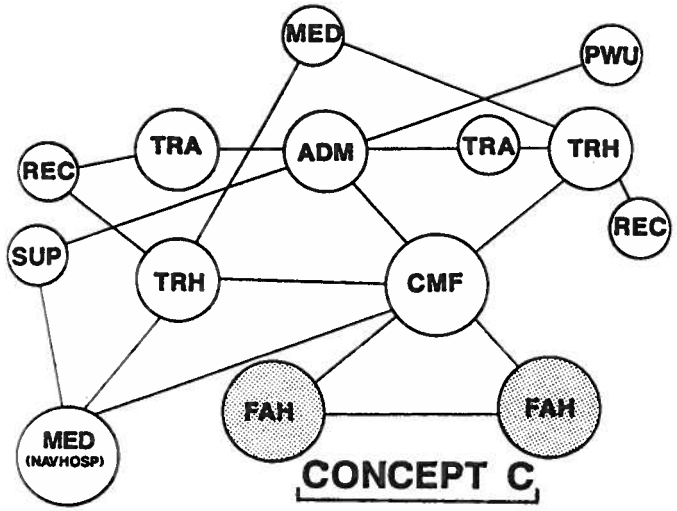
The functional relationship proposed as the basis of the land use plan is shown in Figure V-2. It is a modification of Concept B and gives fairly equal emphasis to training, troop housing, administration, community facilities and family housing.

Advantages: The proposed concept maintains a separation between military and non-military functions. Although training and troop housing are not centralized, the "eastern" and "western" nodes are better

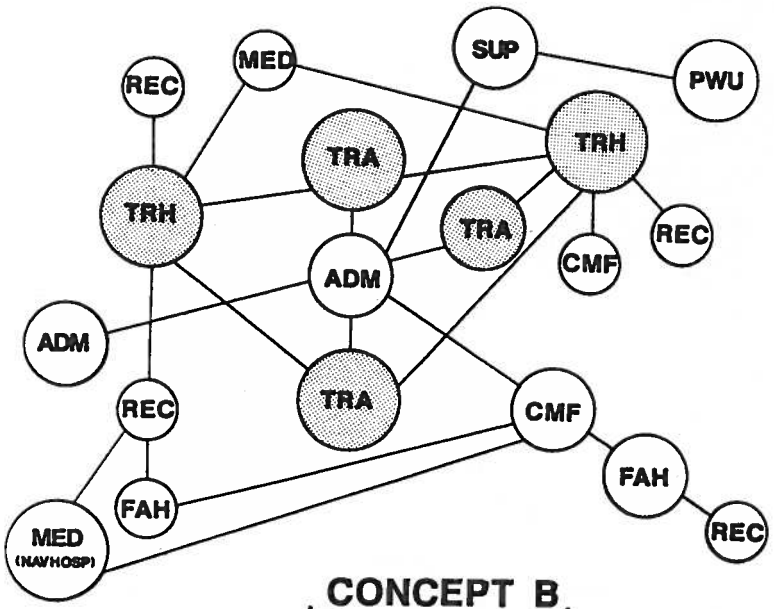


CONCEPT A

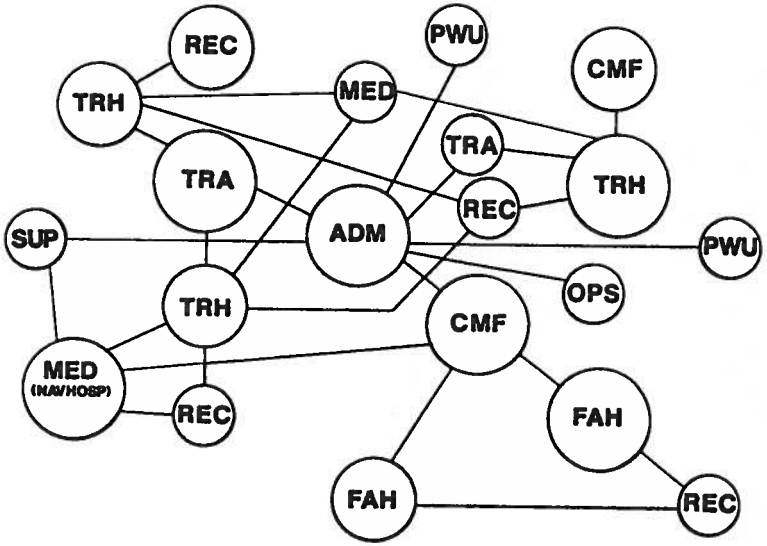
ADM – ADMINISTRATION	OPS – OPERATIONS
CMF – COMMUNITY FACILITIES	REC – RECREATION
FAH – FAMILY HOUSING	SUP – SUPPLY
PWU – PUBLIC WORKS UTILITIES	TRA – TRAINING
MED – MEDICAL	TRH – TROOP HOUSING



CONCEPT C



CONCEPT B



PROPOSED

ALTERNATIVE & PROPOSED DEVELOPMENT CONCEPTS
Corry Station

FIGURE V-2

supported by recreational and community facilities than currently is the case.

Disadvantages: The supply function remains decentralized and located so as to co-mingle service traffic with other base traffic. Troop housing and training are separated, requiring more dispersed support facilities than would be the case if they were more centralized.

PROPOSED LAND USE PLAN

The Proposed Land Use Plan for the Naval Technical Training Center reflects the refinement of the proposed development concept presented in the previous chapter. By identifying general areas of appropriate existing and proposed development, the land use plan creates a guide for future capital improvements.

Land Use Plan

The Proposed Land Use Plan is shown in Figure VI-1. As a generalized map it is not building-specific, but a comparison of it to the existing land use map (Figure III-2) shows that areas of existing functions are proposed to be retained. Expansion of certain existing facilities (buildings and adjacent land areas) also is proposed, specifically in the areas of:

- recreation
- training
- supply
- family housing
- troop housing

Capital Improvements Plan

The Capital Improvements Plan is the primary tool for implementing the recommendations of the master plan. With the Land Use Plan as a guide, the CIP details the scope, funding, siting and construction schedule of specific projects considered necessary to implement the master plan. The Capital Improvements Plan, including project descriptions, is found in Chapter IX.

Circulation

Proposed vehicular routes are shown in Figure VI-2. Pedestrian and bicycle routes are assumed to parallel them.

Roads

The proposed land use plan requires construction of new roads to facilitate circulation in newly developed areas and to improve circulation in existing areas. Highlights of proposed roads include:

1. A western extension of Roberts Avenue to connect with Entrance Road near the west gate. This road will provide access to the expanded recreation and training facilities in the northwest corner of Corry Station, provide access to the proposed troop housing area,

and create an alternate route for service traffic traveling to and from the supply area on the northern boundary.

2. An extension of Seventh Street (which runs between the current Boys Base and medical clinic areas) to angle southwesterly to the Naval Hospital. This road will provide central access to new training and administration areas and expanded recreation and troop housing areas. Care must be taken in designing the road, however, so that it does not act as a barrier to pedestrians. This new road has the potential of "making or breaking" the campus atmosphere of the station. A boulevard with a wide, landscaped median would be especially attractive.

3. A new road to connect Entrance Road near the west gate to the Seventh Street extension described in #2 above in order to complete the "loop." The intersection of this road with the Seventh Street extension would be enhanced by a "landmark" or focal point placed in a grassed and landscaped island.

4. An extension of Pless Avenue (serving family housing) so as to connect all family housing and to provide internal access to the Shopping Mall.

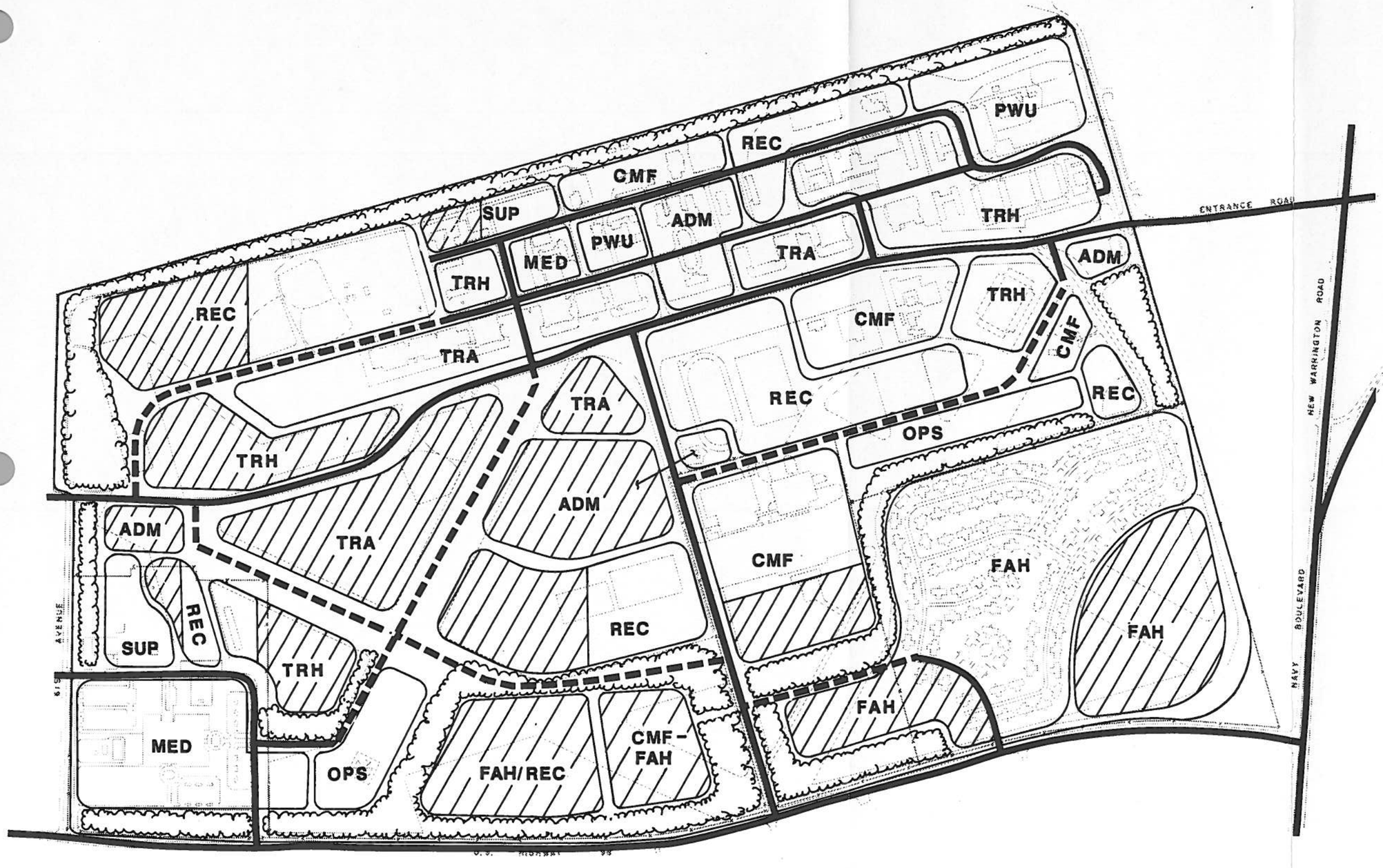
5. A connection between Smith Avenue near Entrance Road at the main gate with the Navy Exchange Road at the Shopping Mall area. This connection will improve circulation in the eastern central portion of Corry Station and provide better access for service traffic associated with the mall.

Sidewalks

To promote pedestrian circulation, sidewalks should be constructed along both sides of all new roads and be connected to existing sidewalks wherever possible. Certain pedestrian links are particularly logical, such as between family housing, recreation and community facilities; and between troop housing, training, recreation and community facilities. Winding sidewalks irregularly through natural areas would be especially effective in creating pleasant and comfortable pedestrian experiences.

Bicycle Paths

Bicycle circulation can be especially efficient on a campus such as the NTTC and is promoted in the land use plan. Such connections enable the NTTC and the Naval Hospital, for example, to share recreation facilities, thereby reducing duplication of facilities. Encouraging bicycle use also may reduce the need for vehicular parking, if paths are well-located in relation to desired destinations otherwise too far for comfortable walking.



PROPOSED LAND USE PLAN
Corry Station

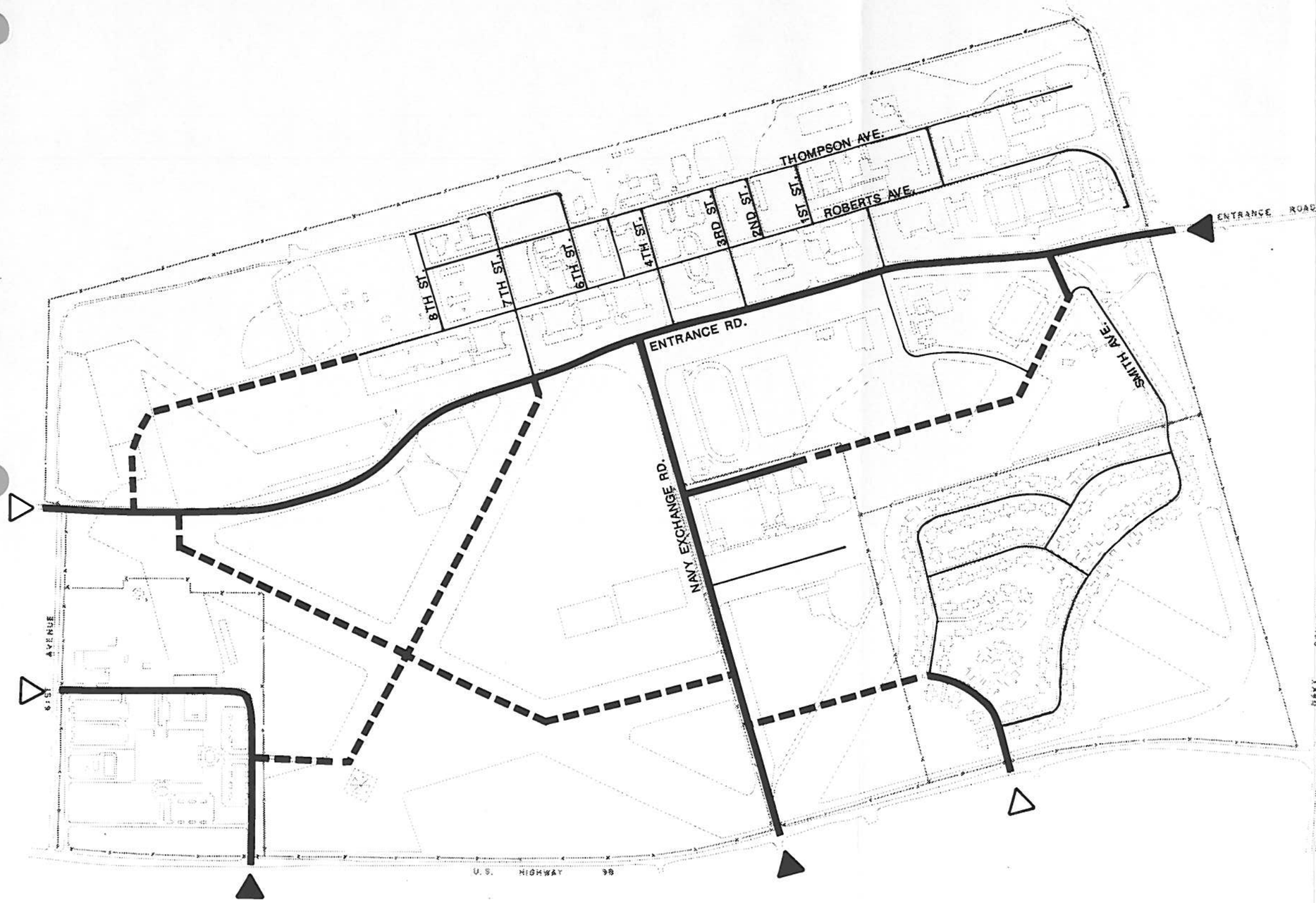
ADM - ADMINISTRATION
CMF - COMMUNITY FAC.
FAH - FAMILY HOUSING
PWU - PUBLIC WORKS UTILITIES
MED - MEDICAL/DENTAL
OPS - OPERATIONS
REC - RECREATION
SUP - SUPPLY
TRA - TRAINING
TRH - TROOP HOUSING

- EXISTING LAND USE
- PROPOSED LAND USE
- NATURAL AREA OR BUFFER
- EXISTING MAJOR ROAD
- PROPOSED MAJOR ROAD

200 0 200 400 800
SCALE IN FEET

FIGURE VI-1

VEHICULAR CIRCULATION PLAN
Corry Station



- PRIMARY ROAD
- SECONDARY ROAD
- PROPOSED ROAD
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE

200 0 200 400 600
SCALE IN FEET

FIGURE VI-2

Parking

To minimize cost and creation of more asphalt, parking associated with new facilities should be offstreet and shared whenever possible. Consideration of the parking needs of nearby existing or proposed facilities when designing a new facility is sound planning and efficient use of space. Functions expected to be used at different hours, such as recreation and administration, lend themselves particularly well to shared parking.

Consolidation of parking, accompanied by attractive landscaping, will help to separate vehicles from pedestrians and promote the desired campus atmosphere of Corry Station. Bike racks should be included in all parking designs to promote alternative transportation.

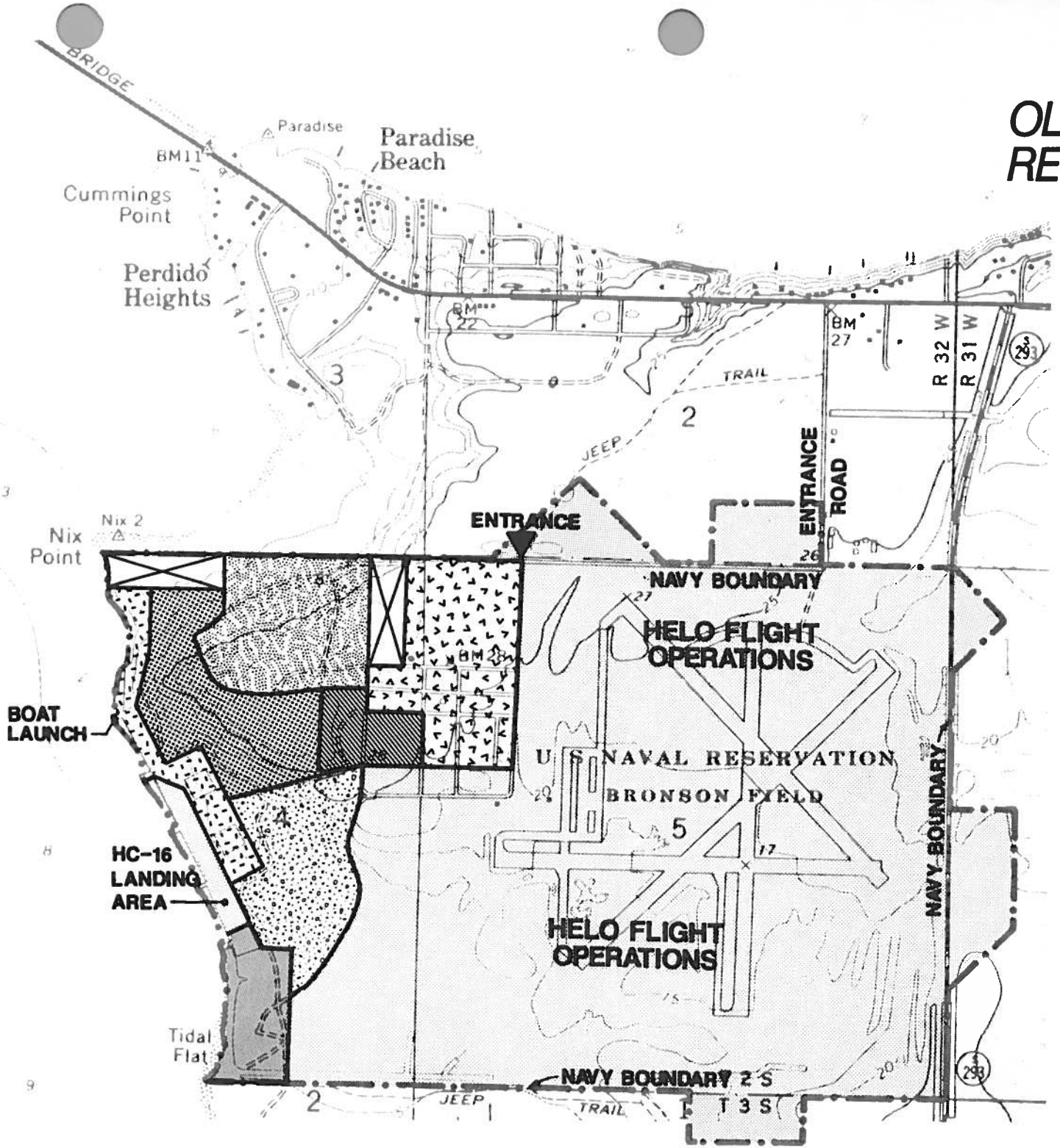
Utilities

All utility services at NTTC, Corry Station are provided by the Navy Public Works Center, and all utility buildings and facilities are held on the NPWC plant account. The existing water, electricity, and gas utility support systems are adequate to accommodate projected growth within the existing build-up areas. At present, there is a sewage connecting moratorium with the Escambia County Utility Authority (ECUA). Upon completion of the ECUA facility expansion, which is still in the planning stage, the moratorium will be lifted. Until then the sewage support system will be inadequate to accommodate projected growth. A project to connect the NTTC sewage system to the mainside treatment plant at NAS will not be completed until after the ECUA moratorium is lifted. The steam utility maximum output will be 71,000 lbs/hr after the completion of the boiler replacement project. The present maximum steam demand is 38,000 lbs/hr, therefore, the steam utility support system is adequate for projected growth. As new buildings and functions are expanded to the area between NTTC and the Naval Hospital, major extension of utility distribution lines and collection systems will be required for each primary utility system. In most cases this can be accommodated in conjunction with individual military construction projects. The important consideration, however, is that appropriate spacing and sizing of the facilities be based on the long range land use plan as identified in the master plan.

OLF Bronson Recreation Area

A major recreational complex is being developed on a portion of the OLF Bronson site to serve the recreational needs of the overall Pensacola Naval Complex. Recreational facilities to be provided include picnic areas; wilderness camping and improved camp sites; nature trails; beach swimming area; boat launches; and children's playground and summer camp (See Figure VI-3). The Bronson Field Recreation complex is a joint undertaking between Naval Air Station, Pensacola and Naval Technical Training Center, Corry Station. NAS Pensacola is providing the land area and NTTC will be providing the appropriate facilities and management responsibilities.

OLF BRONSON RECREATION AREA



- WILDERNESS CAMPING
- NATURE TRAILS
- PICNIC & BOATING
- JOINT USE RECREATIONAL AREA
- PICNIC AREA
- WILDERNESS AREA
- SCOUT AREA
- WILDERNESS RESTRICTED
- HELICOPTER FLIGHT OPERATIONS (TO REMAIN)

0 1000 2000 3000

SCALE IN FEET

FIGURE VI-3

BASE EXTERIOR ARCHITECTURE PLAN

The Base Exterior Architecture Plan for Corry Station (BEAP) was adopted in 1983. It contains a thorough analysis of the existing visual character of Corry Station and sets forth many specific ideas for enhancing existing facilities and optimizing the function and attractiveness of new facilities. A redesigned main gate area already reflects the positive implementation of the BEAP.

The BEAP called for an update of the NTTC Activity Master Plan and recommended that the update consider the following items:

- o the location, orientation and function of future buildings and structures
- o the development of well-defined primary and secondary roadways for vehicular use
- o the development and placement of well-landscaped, offstreet parking facilities; the development of pedestrian ways and parade areas or open space and recreational activity areas
- o associated landscaping, graphics and signs and other support programs.

A discussion of this activity master plan's conformance with the BEAP follows.

Architecture

The Proposed Land Use Plan is a generalized guide to development of areas for broad categories of land use. As such, it is not meant to be structure-specific. To locate new facilities, the appropriate sequence to follow would be to 1) consult the proposed land use plan to select the general location for the improvement, taking into account its effect on circulation and its relationship to existing or proposed surrounding uses; 2) follow the guidelines in the BEAP for structure type, color and orientation to other structures in its functional district; and 3) develop a detailed site plan to actually site the new facility, checking the results against the objectives and guidelines in the activity master plan and the BEAP.

The land use plan supports the concepts in the BEAP in that the land use plan maintains existing activity nodes, creates new nodes, and groups activities to promote a campus effect.

Landscaping

The Proposed Land Use Plan supports the BEAP contention that landscaping and landscape architecture elements such as benches, litter bins and lighting provide the common thread or unifying scheme for the base. A relatively small investment in new plant material and preservation of existing tree cover will enable buildings which otherwise may be unaesthetic to better blend in, define and soften off-street parking areas, separate vehicular and nonvehicular transportation routes, and increase the comfort of base users by creating shade. Particular attention should be paid to lighting in pedestrian areas used in the evenings or early morning, such as sidewalks, bike paths, and recreation and community facilities areas. Morale may be influenced positively by a pleasing environment.

Visual Communications

Visual communication is most directly accomplished by appropriate signs. Design detail for signs, which is too specific to be dealt with in a land use plan, was well-covered by the BEAP. However, when facilities initially are planned, certain factors should be kept in mind:

- Signs on or near new facilities should be in conformance with the BEAP guidelines
- Freestanding signs should be sized to accommodate anticipated facilities as well as programmed ones to minimize the number and cost of signs.
- Lighting and signs should be considered together to complement each other and to ensure their effectiveness for the driver and the pedestrian.

PRELIMINARY ENVIRONMENTAL ASSESSMENT

Introduction

The activity master plan for the NTTC Corry Station balances the military and non-military needs of the Navy for both the short- and long-term. In doing so, it offers a proposed land use plan that balances the need to develop land to meet facility requirements with the need to preserve natural areas for the benefit of animals and for the well being of people.

The results of the planning effort have been influenced by the constraints of natural and man-made factors at regional, local and site-specific scales. Several alternative approaches to uses and locations have been examined, resulting in a reasonable compromise that may be expected to serve the needs of the Navy into the indefinite future.

Specific objectives of the activity master plan are found in Chapter IV, while they are reiterated and expanded upon in preface to the proposed land use plan in Chapter VI.

Existing Environment of the Proposed Actions

There are no limiting qualities to development associated with the natural environment at the NTTC. Soils are relatively well-drained and stable; topography is level; there are no flood plains, coastal zones or wetlands. These factors are addressed in more detailed in Chapter III.

Although large areas of planted pines on-base are managed under the Natural Resource Management Plan, the occurrence of endangered species, critical habitat or areas of special biological significance are not known to exist on Corry Station.

There are no known historic or prehistoric resources on site.

Project Descriptions and Potential Environmental Consequences

Detailed project information may be found in the Capital Improvements Plan in Chapter IX. This section, therefore, briefly summarizes the 18 projects proposed and discusses their potential environmental consequences.

Evaluation Factors

The factors considered in a Preliminary Environmental Assessment (PEA) fall into three categories: (1) conformance with land use plans, policies and controls for the affected area; (2) impacts on the natural environment; and (3)

socioeconomic impacts. Impacts, if any, may be adverse or positive, direct or indirect, temporary or permanent.

Those items to be considered under land use plans and policies include:

- Station master plan
- Off-station community zoning
- National Historic Preservation Act
- Coastal zone management
- Flood plain ordinances
- Air, water and solid waste regulations
- Other

Natural environmental considerations are those that will (or will not):

- Result in appreciable amounts of emissions into the atmosphere of toxic or hazardous substances or any other known pollutant
- Introduce toxic or hazardous substances or significant amounts of chemical, organic substances or solid wastes into bodies of water, on land or otherwise affect water or soil quality
- Cause the creation of excessive noise, when considering the proximity and likely effects or noise on humans or wildlife
- Require the use of non-renewable energy sources in apparently excessive or disproportionate amounts
- Significantly alter the rate of sediment deposit or temperature of a body of water
- Result in significant destruction of wildlife habitat
- Adversely or beneficially affect any endangered or threatened species or any candidate endangered or threatened species
- Result in destruction of wetlands
- Affect other environmental areas

Socioeconomic factors considered (that is, potential impacts on people or the economy) include:

- Area appearance
- Traffic
- Schools
- Historical resources
- Health and safety
- Land management
- Population patterns
- Housing
- Community facilities
- Employment
- Utilities
- Security
- Personnel morale

Additions and Renovations

Eleven of the proposed capital improvement projects involve either renovation of or additions to existing facilities. These projects are:

P-099R	Administration Building Modernization
P-102	HVAC Energy Conservation Investment Program
P-121	Central Chilled Water System
P-122	Replace Perimeter Fence
P-123	Entrance Road Improvements
P-130	Enclose Swimming Pool Building 3734
P-132	Facility Energy Improvements
P-133	Addition and Modernization - Building 511
P-134	Addition and Modernization - Building 512
P-135	Religious Education Center
P-110	Gymnasium

The purposes of these projects are to improve inadequate or substandard facilities, accommodate mission changes, or increase energy or functional efficiency.

These facilities are or will be designed to be consistent with the 1983 BEAP study recommendations concerning district character, style and color. Although no effects are anticipated on historic or archaeological resources, coordination with the Florida Division of Historic Resources is necessary to confirm this judgment prior to actual construction. It is anticipated that there can be some negative impacts on noise levels and vegetation during construction.

New Construction

Seven projects are new buildings or other facilities and include:

P-106	Multi-Purpose Building
P-107	Library
P-114	Police Station
P-116	Child Care Center
P-119	Photo School
P-128	Softball Complex
P-129	Boat House and Recreation Distribution Center

The purposes of these projects are to accommodate mission changes, increase functional efficiency, and improve personnel fitness and morale.

These facilities are or will be designed to be consistent with BEAP recommendations regarding district character, style and color. No effects are anticipated on historic or archaeological resources, but there should be coordination with the Florida Division of Historic Resources to confirm this prior to construction. Temporary adverse impacts on noise levels and vegetation are expected during construction. Reduction of natural resource

management areas is expected, but this effect can be mitigated by careful siting of new structures and parking areas to minimize tree loss and by replacement of trees and vegetation to the maximum extent practicable following construction. Negative effects on utilities may be expected due to increased consumption of water, steam, gas, and electricity and increased production of sewage. There is adequate steam, gas, water and electrical capacity available for future construction in the undeveloped areas of Corry Station, however, these infrastructure services will have to be extended and funded by each construction project. Sanitary sewage treatment will have to be provided with each construction project until the moratorium is lifted on disposal and treatment via the Escambia County Utilities Authority treatment plant or until the tie-in is constructed from Corry Station to the NAS mainside treatment plant. Also, utilizing the undeveloped land areas will require extensive improvements to the storm sewer system, incorporating retention ponds and filtration systems to meet impending state water quantity and quality discharge parameters.

All projects proposed are expected to improve operational efficiency and many will improve the habitability of existing facilities. No appreciable change in long-term environmental productivity is expected, nor is any significant irreversible or irretrievable commitment of resources.

Possible Conflicts with Other Governmental Plans

No conflicts are apparent between the recommendations of the NTTC Activity Master Plan and the land use plans, policies and controls of the federal, regional, state and local governments.

Mitigation of Adverse Environmental Impacts

Because there are no significant adverse environmental impacts associated with implementation of the proposed land use plan, no means of mitigation are needed. However, care should be taken when development occurs in natural resources management areas to minimize clear-cutting, to preserve significant trees and stands of trees, to retain understory, and to retain vegetation for visual and noise buffers around the helipad, the base boundary and between differing land uses.

Summary

The PEA finds that there are no significant environmental impacts associated with implementation of the proposed land use plan. However, as individual improvement projects are proposed and sited, it will be necessary to investigate and evaluate each site to ensure that specific areas are not being impacted. Two challenges which will require care when development occurs in natural resources management areas, however, are:

- retaining the maximum amount of wooded natural resource management areas to minimize loss of habitat for birds, squirrels and other small mammals, and to ensure aesthetic areas for human users of newly developed areas

- storing and filtering increased stormwater runoff with these natural areas by retaining as much vegetation as possible and by planning adequate areas for grassed swales, attractive detention and retention areas and other similar stormwater management techniques.

CAPITAL IMPROVEMENTS PLAN

The Capital Improvements Plan (CIP) is a formalized program for implementing the recommendations of the master plan for the Naval Technical Training Center, Corry Station, Pensacola Florida. The purpose of the CIP is to identify projects that are required to achieve mission objectives and to establish priorities and coordinate the construction, renovation and demolition activities associated with these projects.

Planning Objectives

The primary objective of any military master plan is to preserve and enhance the ability of that particular installation to fulfill its assigned mission. Consequently, the military requirements take precedence over ancillary and support functions even though each of these functions may have an assigned mission of its own. The ability to perform these primary military functions in an efficient and cost-effective way also is an overriding objective, as is maintaining the most pleasant environment in which these activities take place.

Beyond these broad objectives, there are a number of specific objectives that the master plan for the NTTC Corry Station attempts to achieve. These are to:

1. Maximize utilization of existing facilities;
2. Retain traditional use areas;
3. Separate hazardous facilities from populated areas;
4. Maintain security for sensitive functions and control of access;
5. Maintain adequate, efficient and economical utility support;
6. Maintain compatibility with off-base land uses;
7. Maintain consistency with previous installation master plan and other related plans;
8. Provide flexibility to respond to unforeseen long-range needs;
9. Separate noise-sensitive land uses form high noise exposure areas;
10. Preserve and maintain natural resource areas;
11. Improve traffic flow entering and leaving the base during peak hours; and

12. Separate visitor traffic from military/employee traffic.

All projects identified in this CIP are consistent with these objectives.

Project Identification

A total of eighteen projects are included in the Capital Improvement Plan (CIP) for NTTC Corry Station: four (4) programmed projects in the FY90-FY94 Five Year Defense Plan (FYDP), and fourteen (14) un-programmed projects. No additional projects were identified during the Master Planning process. Table IX-1 outlines the projects included in the CIP. Figure IX-1 identifies the location of FY90-FY94 programmed projects. Project Data Sheets have been prepared for the four programmed projects in the FYDP. For projects that are unprogrammed (UP), a general description of the project's features is provided as follows:

Not Supported by CNET

P-099R This project modernizes the Administration Building 502 and includes life safety improvements, handicapped accessibility provisions, energy conservation improvements, exterior maintenance repairs and interior renovations.

Project scope revised/ increased

P-106 This project will construct a 250-seat auditorium/theater with a stage and dressing rooms; and a 2500 square foot entertainment workshop with a meeting room, permanent storage closets for special interest groups, and a band practice room with related storage. The total project scope is 6700 S.F. The auditorium and theater will be used jointly for military training lectures and film exhibition.

To be revised/ cancelled/ downscoped

P-107 This project will construct a single story, permanent masonry building with moveable partitions between classrooms to house the station library and educational service office and classrooms. Total project scope is 12,535 SF.

P-110 This project will construct a two-story gymnasium of structural steel, brick and masonry with a built-up roof and concrete slab on grade. The total project scope is 21,923 SF and will be utilized by the NTTC command for the physical fitness program.

To be cancelled if plans to convert old theater materialize

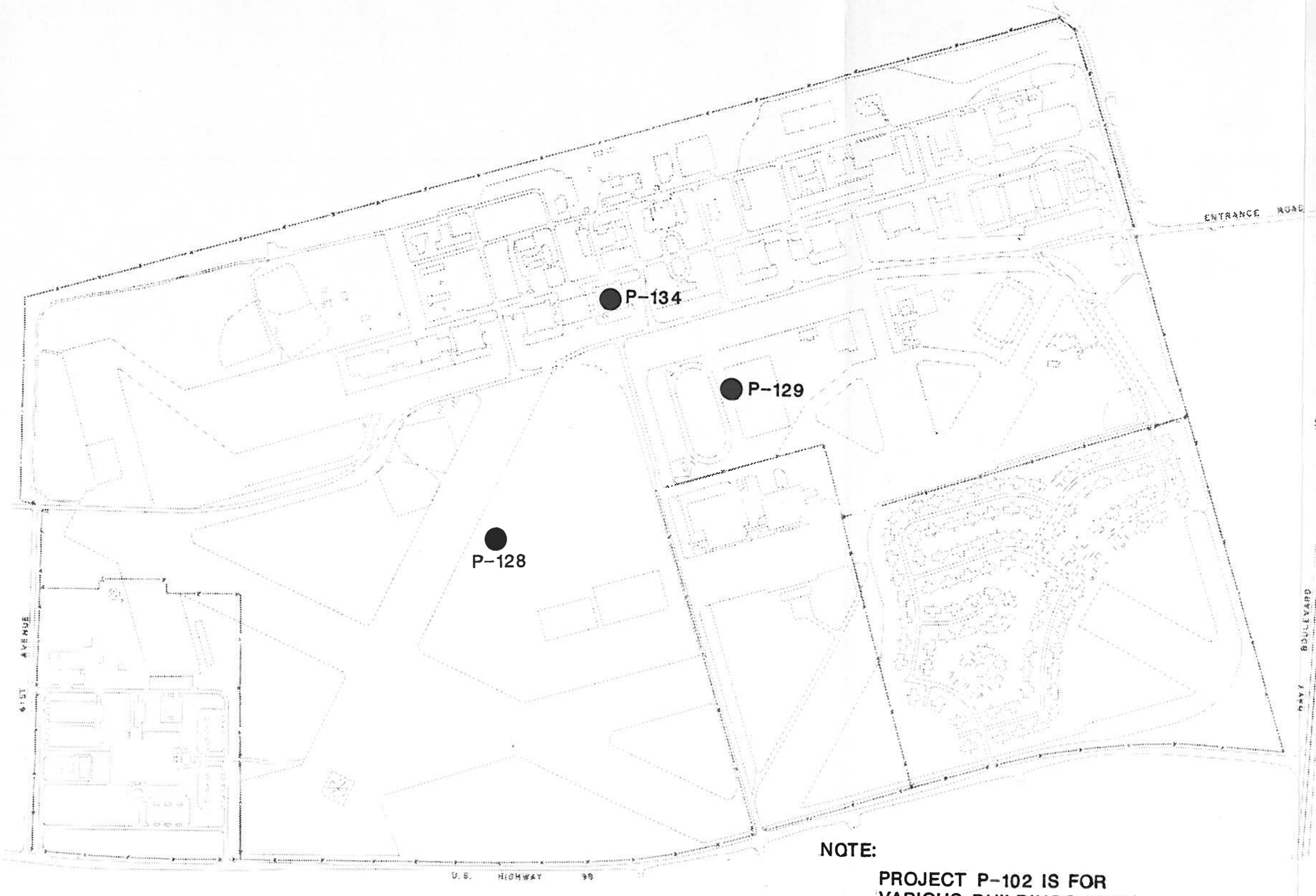
P-114 This project will construct a new single story masonry building to consolidate the activity's 63-person Security Division. The total project scope is 2603 SF.

A variety of possibilities under consideration

P-116 This project will construct a single story, masonry building for use as a child care center. The total project scope is 11,000 SF and includes parking, site improvements, playground equipment, and longer than average utility runs. This facility will serve military personnel at NTTC and the Naval Hospital; and additionally, provide drop-in child care service to patrons of the Naval Hospital, Navy Exchange Mall and Commissary.

LOCATION OF CAPITAL IMPROVEMENT PROJECTS Corry Station

FY 90-FY 94
C.I.P. PROJECTS



NOTE:

PROJECT P-102 IS FOR VARIOUS BUILDINGS-NOT SITE SPECIFIC

200 0 200 400 600
SCALE IN FEET

FIGURE IX-1

TABLE IX-1
CAPITAL IMPROVEMENTS PROJECTS

Program Year	Project Number	Title	Cost ($000)
1990	P-128	Softball Complex	950
1990	P-129	Boat House and Recreational Distribution Center	750
1994	P-102	HVAC Energy Conservation Investment Program	2,200
1994	P-134	Addition and Modernization - Building 512	3,800
UP	P-099R	Administration Building Modernization	2,200
	P-106	Multi Purpose Building	860
	P-107	Library and Educational Services	1,300
	P-110	Gymnasium	2,000
	P-114	Police Station	445
	P-116	Child Care Center	970
	P-119	Photo School	5,000
	P-121	Central Chilled Water System	800
	P-122	Replace Perimeter Fence	470
	P-123	Entrance Road Improvements	2,200
	P-130	Enclose Swimming Pool-Building 3734	1,000
	P-132	Facility Energy Improvements	440
	P-133	Addition and Modernization - Building 511	3,950
	P-135	Religious Education Center	520

P-119 This project will construct a new facility for the School of Photography so that it can be relocated from NAS Pensacola to NTTC Corry Station.

P-121 This project will combine existing chilled water systems in six training buildings and two barracks to form a central chilled water system. The project has a Savings to Investment Ratio of 3.0.

P-122 This project replaces existing perimeter fence around Corry Station to meet current physical security regulations.

P-123 This project includes improvements to the Entrance Road in order to better define roadways, improve traffic flow and safety, remove parking areas from traffic flow, provide separate entrances into each parking unit, enhance roadway and parking lot surface drainage, and provide landscaping for functional and aesthetic improvements in accordance with the 1983 BEAP for Corry Station.

P-130 This project will erect, over an existing 25 meter pool, a steel framed pool enclosure with sliding glass wall panels and roll-back roof panels. A pool heater, enclosure heater and ventilation system will be installed. Supporting facilities include a 1200 LF natural gas line and 520 SF mechanical room.

P-132 Project will consist of retrofitting the existing heating, ventilation and air conditioning (HVAC) systems for Buildings 511, 512, 513, and 516 in order to reduce the systems energy usage. The existing constant volume reheat type HVAC system will be converted to variable volume HVAC system.

P-133 This project will renovate Building 511, which was originally constructed as an aircraft hangar and is currently used as an applied instruction building for cryptologic training. The project will completely renovate the building interior, replace metal hangar doors with permanent masonry or brick walls, and install a second floor within the existing building shell. This project also includes the purchase, erection, and removal of temporary buildings for use as interim classrooms and a temporary expansion of the security compound.

P-135 This project will construct an addition to the chapel. The addition will be used for religious education purposes. Total project scope is 5880 SF.

Detailed Project Descriptions

The following pages include "Project Data Sheets" for each military construction project currently in the Naval Technical Training Center Five Year Defense Plan (FYDP).

PROJECT DATA SHEET

COMPONENT	ESTIMATED YEAR	DATE
NAVY	1990	08/09/88

INSTALLATION AND LOCATION
NTTC CORRY STATION, PENSACOLA, FL

PROJECT TITLE
SOFTBALL COMPLEX

PROGRAM ELEMENT	CATEGORY CODE	PROJECT NUMBER	CURRENT COST ($000)
	750-20	P-128	950

Item	U/M	Quantity	Unit Cost	Cost ($000)
SOFTBALL FIELDS COMPLEX	LS	1		$724
SUPPORTING FACILITIES	LS	1		$127
SUBTOTAL				$851
CONTINGENCY (5%)				$43
TOTAL CONTRACT COST				$894
SUPERVISION, INSPECTION, & OVERHEAD (5.5%)				$49
TOTAL REQUEST				$943
TOTAL REQUEST ROUNDED				$950

DESCRIPTION OF PROPOSED CONSTRUCTION:
Four softball fields with grass outfields, sand clay infields, chainlink fences and backstops masonry block dugouts with plywood sheathing and asphalt roll roofing, electronic scoreboards, lights, irrigation system, and metal bleachers. A permanent, two story, concrete masonry and brick veneer recreation pavilion with utilities for concession equipment and restrooms.

REQUIREMENT: REQUIREMENT: 15 EA (750-20)
2600 SF (740-78)
ADEQUATE: 8 EA (750-20)
750 SF (740-78)
SUBSTANDARD: 0 EA (740-87)
This project will construct 4 new softball fields with lights and scoreboards, and a two-story recreational pavilion housing a concession stand, restrooms, equipment storage room , an officials observation area and scoreboard control room.

PROGRAMMING DATA ACTIVITY UIC: N63082____ ALTERNATE HOST: _____ SUP UNIT: _____ SPEC AREA: _____ INVESTMENT PROGRAM: 39____ SIR: _____ RESOURCE SPONSOR: _____ MAJ/SUBCLAIMANT CODE: HD____ INVESTMENT CATEGORY: 16____
MOBILIZATION INDICATOR: _____ ACTIVITY PRIORITY: _____ CLAIMANT PRIORITY: _____ FLEP PRIORITY: _____
READINESS RATING: _____

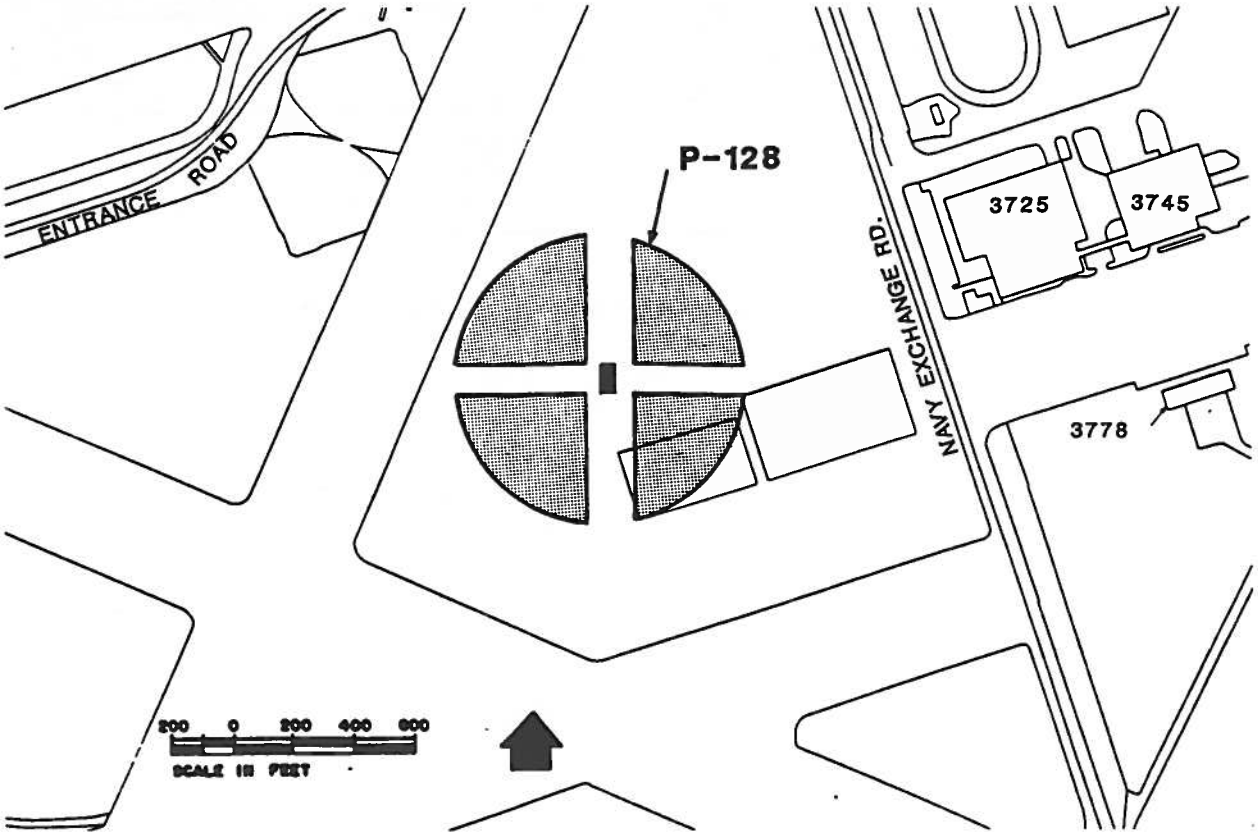
PROJECT DETAIL DATA:

CATEGORY CODE	DESCRIPTION	SCOPE	U/M	CC/MC	VALIDATION INDICATOR
740-78	Recreational Pavilion	1850	SF	1B	
750-20	Playing Field	4	EA	1B	

REQUIREMENT CERTIFICATION:

ACTIVITY _____
MAJOR CLAIMANT _____ DATE: _____
NAVFACENGCOMHQ _____ DATE: _____
DATE: _____

LOCATION AND SITE PLAN:



SITING RATIONALE:
This project requires a large, open site and thus is located in a grassy open area south of the existing softball fields. The provimity to existing fields maintains continuity in land use patterns. This project must be sited a a minimum of 100 feet east of the paved strip to ensure that fencing and lighting for the fields do not encroach upon the takeoff and departure safety zone for the Helipad located southwest of the proposed site.

EFD REVIEW/ANALYSIS:

REQUIRES FURTHER ACTION?	NO	YES	COMMENTS
Explosives Safety	X		
Airfield Safety		X	MUST NOT ENCROACH ON HELIPAD SAFETY ZONE
Electromagnetic Radiation	X		
AICUZ Violation	X		
Change to Approved Master Plan/CIP	X		
Coastal Zone Management	X		
Natural Resource Plan	X		
Dredging/Filling Permits	X		
Wetland/Floodplain	X		
Hazardous Wastes On Site	X		
Cultural Resources Impact	X		
Other Site Problems (List)	X		
Utilities Support	X		
Roads Parking	X		
Preliminary Environmental Assessment	X		
Preliminary Hazards Analysis	X		
Other (List)	X		

EFD Validation:

Site Approved: Yes _X_ No ___ Deferred ___
Name: R. LATTIMORE

Project Supported by SFPS: Yes _X_ No ___
Date: 1/27/87

PROJECT DATA SHEET

COMPONENT	ESTIMATED YEAR	DATE
NAVY	1990	08/09/88

INSTALLATION AND LOCATION
NTTC CORRY STATION, PENSACOLA, FL

PROJECT TITLE
BOATHOUSE & REC EQUIPMENT DISTRIBUTION FACILITY

PROGRAM ELEMENT	CATEGORY CODE	PROJECT NUMBER	CURRENT COST ($000)
	740-87	P-129	750

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITY	SF	12100	51.07	$618
SUPPORTING FACILITIES	LS			$78
SUBTOTAL				$696
CONTINGENCY (5%)				$35
TOTAL CONTRACT COST				$731
SUPERVISION, INSPECTION, & OVERHEAD (5.5%)				$40
TOTAL REQUEST				$771
TOTAL REQUEST ROUNDED				$750

DESCRIPTION OF PROPOSED CONSTRUCTION:
Permanent single story, concrete masonry and brick veneer structure with concrete floor and foundation, wood trusses, and asphalt shingle roof. A separate smaller building with similar construction features will house outboard motors and gasoline cans. Fire protection is included. (Air conditioning - 4 tons)

REQUIREMENT: REQUIREMENT: 10,500 SF (740-87) 1600 SF (740-37)
ADEQUATE: 0 SF (740-87) 0 SF (740-37)
SUBSTANDARD: 0 SF (740-87) 0 SF (740-37)

This project will provide a facility to store, repair, and issue boats and recreational

PROGRAMMING DATA ACTIVITY UIC: N63082 ALTERNATE HOST: _____ SUP UNIT: _____ SPEC AREA: _____ INVESTMENT
PROGRAM: 39 SIR: _____ RESOURCE SPONSOR: _____ MAJ/SUBCLAIMANT CODE: HD INVESTMENT CATEGORY: 16
MOBILIZATION INDICATOR: _____ ACTIVITY PRIORITY: _____ CLAIMANT PRIORITY: _____ FLEP PRIORITY: _____
READINESS RATING: _____

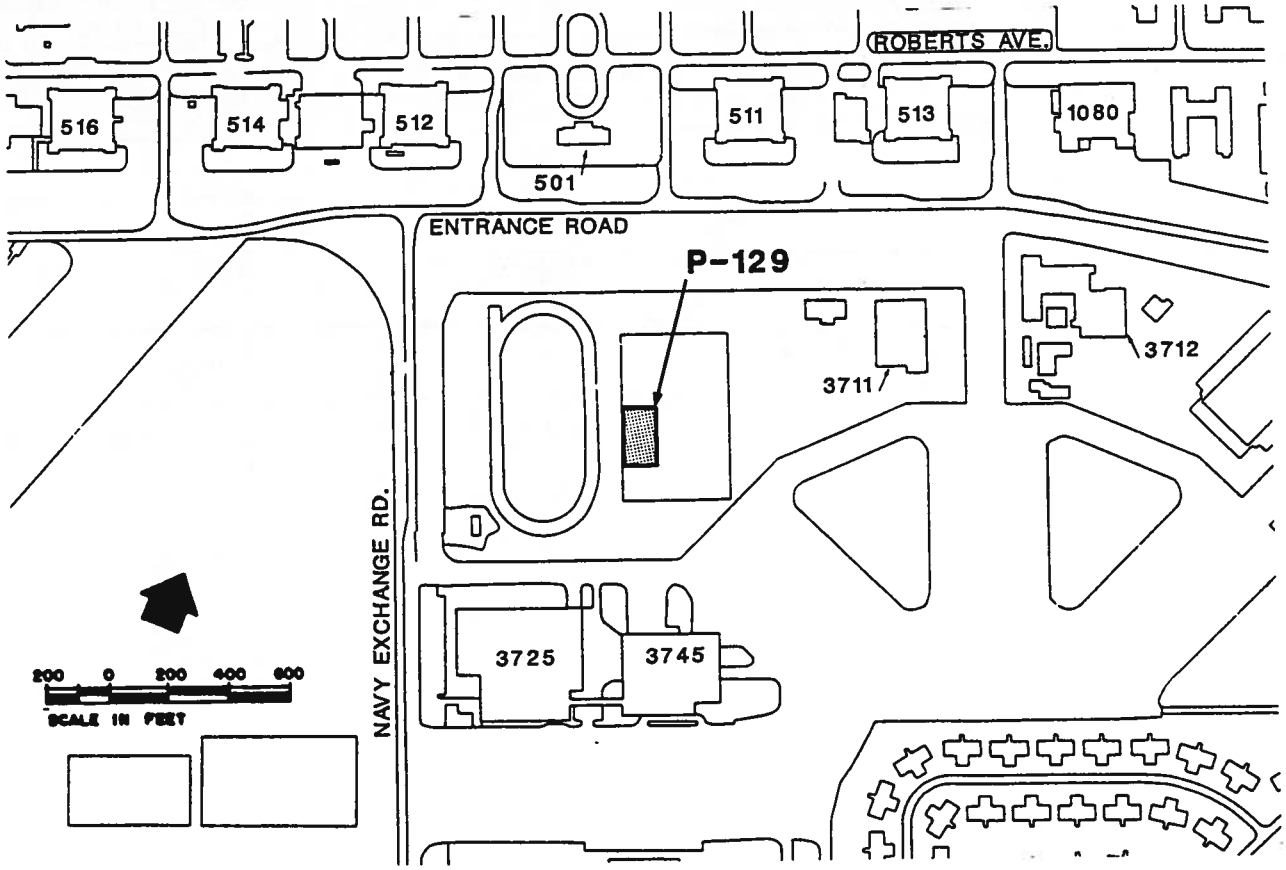
PROJECT DETAIL DATA:

CATEGORY CODE	DESCRIPTION	SCOPE	U/M	CC/MC	VALIDATION INDICATOR
740-87	Boat House	10500	SF	1B	
740-37	Special Services Issue And Office	1600	SF	1B	

REQUIREMENT CERTIFICATION:

ACTIVITY _____
MAJOR CLAIMANT _____ DATE: _____
NAVFACENGCOMHQ _____ DATE: _____
DATE: _____

LOCATION AND SITE PLAN:



SITING RATIONALE:
This facility is sited in proximity to existing recreational buildings and other planned recreational facilities.

EFD REVIEW/ANALYSIS:

REQUIRES FURTHER ACTION?	NO	YES	COMMENTS
Explosives Safety	X		
Airfield Safety	X		
Electromagnetic Radiation	X		
AICUZ Violation	X		
Change to Approved Master Plan/CIP	X		
Coastal Zone Management	X		
Natural Resource Plan	X		
Dredging/Filling Permits	X		
Wetland/Floodplain	X		
Hazardous Wastes On Site	X		
Cultural Resources Impact	X		
Other Site Problems (List)	X		
Utilities Support	X		
Roads Parking	X		
Preliminary Environmental Assessment	X		
Preliminary Hazards Analysis	X		
Other (List)	X		

EFD Validation:

Site Approved: Yes _X_ No ____ Deferred ____
Name: R. LATTIMORE

Project Supported by SFPS: Yes _X_ No ____
Date: 8/08/86

PROJECT DATA SHEET

COMPONENT	ESTIMATED YEAR	DATE
NAVY	1994	08/09/88

INSTALLATION AND LOCATION
NTTC CORRY STATION, PENSACOLA, FL

PROJECT TITLE
HVAC ENERGY CONSERVATION INVESTMENT PROGRAM

PROGRAM ELEMENT	CATEGORY CODE	PROJECT NUMBER	CURRENT COST ($000)
	822-14	P-102	2250

Item	U/M	Quantity	Unit Cost	Cost ($000)
HVAC RETROFIT	LS			
SUBTOTAL				$1,920
CONTINGENCY (10%)				$1,920
TOTAL CONTRACT COST				$192
SUPERVISION, INSPECTION, & OVERHEAD (5.5%)				$2,112
TOTAL REQUEST				$116
TOTAL REQUEST ROUNDED				$2,228
				$2,250

DESCRIPTION OF PROPOSED CONSTRUCTION:
Provide miscellaneous energy conservation retrofits to various buildings. Construction includes timers, converting air handling systems, replacing steam absorption units with electrical centrifugal units, installing attic and under floor insulation, time controls, set back temperature controls, switches, piping and controls, condensate return and steam meters.

REQUIREMENT: REQUIREMENT: N/A ADEQUATE: N/A SUBSTANDARD: N/A
Alterations to heating, ventilation and air conditioning systems are required to reduce energy consumption and operating costs.

PROGRAMMING DATA ACTIVITY UIC: N63082 ALTERNATE HOST: _____ SUP UNIT: _____ SPEC AREA: _____ INVESTMENT
PROGRAM: 56 SIR: _____ RESOURCE SPONSOR: _____ MAJ/SUBCLAIMANT CODE: HD INVESTMENT CATEGORY: 17
MOBILIZATION INDICATOR: _____ ACTIVITY PRIORITY: _____ CLAIMANT PRIORITY: _____ FLEP PRIORITY: _____
READINESS RATING: _____

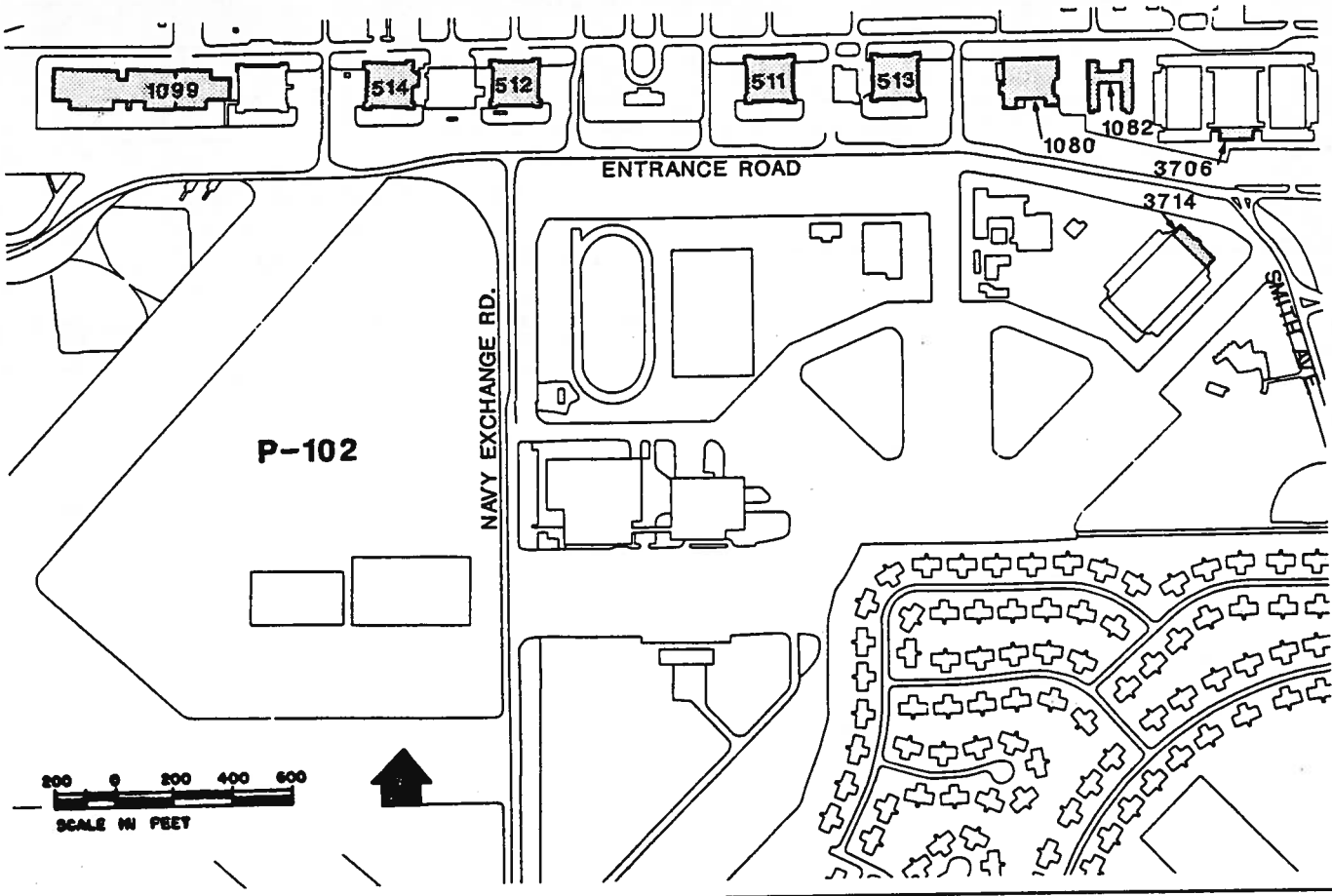
PROJECT DETAIL DATA:

CATEGORY CODE	DESCRIPTION	SCOPE	U/M	CC/MC	VALIDATION INDICATOR
822-14	Condensate Lines To Medium Plant			2B	

REQUIREMENT CERTIFICATION:

ACTIVITY _____
MAJOR CLAIMANT _____ DATE: _____
NAVFACENGCOMHQ _____ DATE: _____
DATE: _____

LOCATION AND SITE PLAN:



SITING RATIONALE:
Not Applicable

EFD REVIEW/ANALYSIS: REQUIRES FURTHER ACTION?	NO	YES	COMMENTS
Explosives Safety	X		
Airfield Safety	X		
Electromagnetic Radiation	X		
AICUZ Violation	X		
Change to Approved Master Plan/CIP	X		
Coastal Zone Management	X		
Natural Resource Plan	X		
Dredging/Filling Permits	X		
Wetland/Floodplain	X		
Hazardous Wastes On Site	X		
Cultural Resources Impact	X		
Other Site Problems (List)	X		
Utilities Support	X		
Roads Parking	X		
Preliminary Environmental Assessment	X		
Preliminary Hazards Analysis	X		
Other (List)	X		

EFD Validation:

Site Approved: Yes _X_ No ___ Deferred ___
Name: R. LATTIMORE

Project Supported by SFPS: Yes _X_ No ___
Date: 07/26/81

PROJECT DATA SHEET

COMPONENT	ESTIMATED YEAR	DATE
NAVY	1994	08/09/88

INSTALLATION AND LOCATION
NTTC CORRY STATION, PENSACOLA, FL

PROJECT TITLE APPLIED INSTRUCTION BUILDING, ADDITION & MODERNIZATION (BLDG.512)

PROGRAM ELEMENT	CATEGORY CODE	PROJECT NUMBER	CURRENT COST ($000)
	171-20	P-134	3800

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITIES	SF	49790	55.88	$2,783
SUPPORTING FACILITIES (TEMPORARY)	SF	11000	55.13	$606
SUBTOTAL				$3,389
CONTINGENCY (5%)				$169
TOTAL CONTRACT COST				$3,558
SUPERVISION, INSPECTION, & OVERHEAD (5.5%)				$196
TOTAL REQUEST				$3,754
TOTAL REQUEST ROUNDED				$3,800
EQUIPMENT FUNDED FROM OTHER APPROPRIATIONS				(10,000)

DESCRIPTION OF PROPOSED CONSTRUCTION:
Proposed construction will renovate and add area to Bldg.512 (Applied Instruction Building). This 1934 building is of permanent type construction and was an aircraft hangar prior to being converted for an instruction Building. Demolition work will completely gut the Building. Temporary Buildings to be purchased to allow training to continue while construction work takes place on Bldg.512.

REQUIREMENT: REQUIREMENT: 516,551 SF ADEQUATE: 321,339 SF SUBSTANDARD: 27,049 SF
Suitable applied instruction space is required for existing and new cryptologic courses. Existing courses support Navy, Army, Air Force, and Marines missions. New courses are identified in the Chief of Naval Operations "C" School Plan. Existing converted aircraft hangar does not have sufficient space or proper configuration to meet training requirements.

PROGRAMMING DATA ACTIVITY UIC: _____ ALTERNATE HOST: _____ SUP UNIT: _____ SPEC AREA: _____ INVESTMENT PROGRAM: _____ SIR: _____ RESOURCE SPONSOR: _____ MAJ/SUBCLAIMANT CODE: _____ INVESTMENT CATEGORY: _____
MOBILIZATION INDICATOR: _____ ACTIVITY PRIORITY: _____ CLAIMANT PRIORITY: _____ FLEP PRIORITY: _____
READINESS RATING: _____

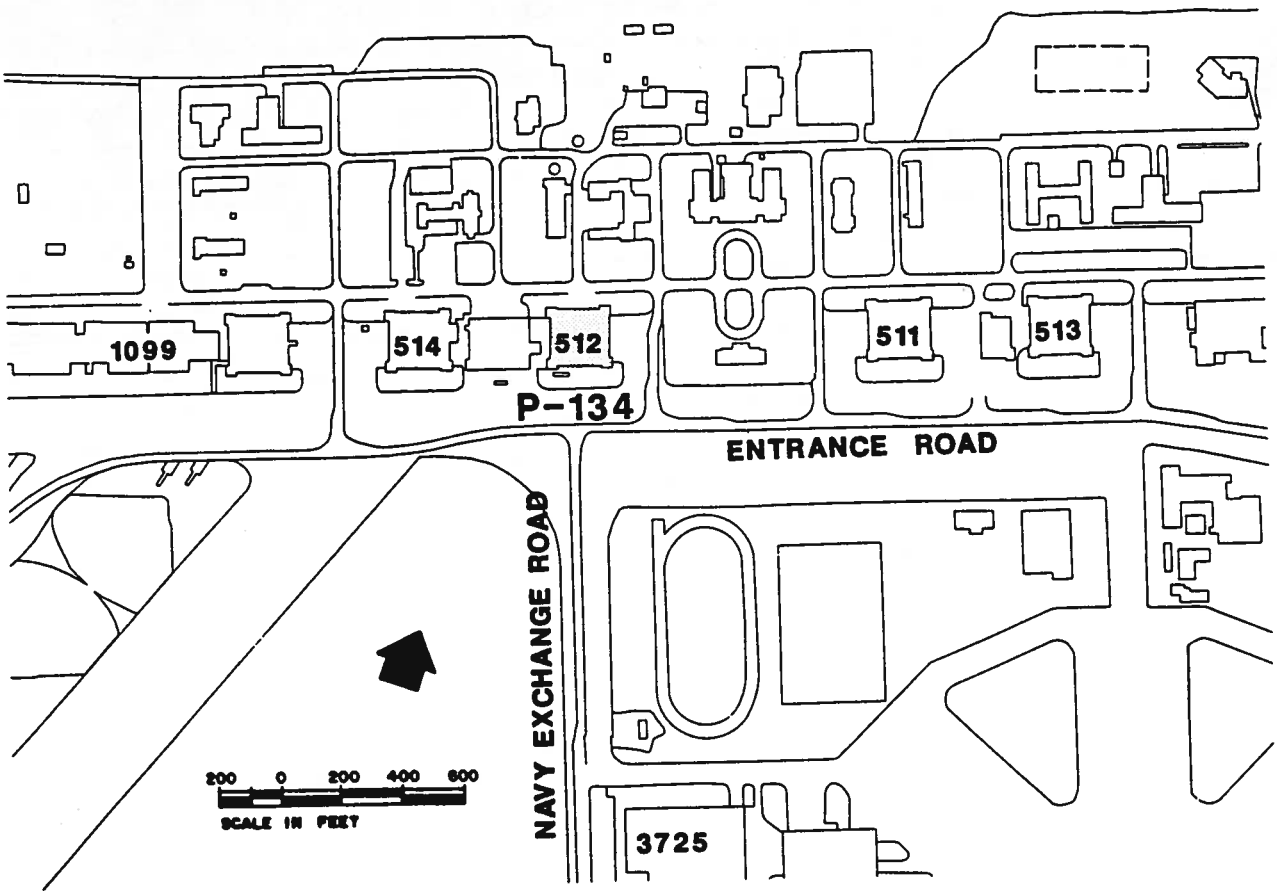
PROJECT DETAIL DATA:

CATEGORY CODE	DESCRIPTION	SCOPE	U/M	CC/MC	VALIDATION INDICATOR
171-20	Applied Instruction Building	49790	SF		
171-20	Temporary Training Support Facilities	11000	SF		

REQUIREMENT CERTIFICATION:

ACTIVITY _____
MAJOR CLAIMANT _____ DATE: _____
NAVFACENGCOMHQ _____ DATE: _____
DATE: _____

LOCATION AND SITE PLAN:



SITING RATIONALE:
Modernization and additionn to existing applied instruction building (Bldg.512)

EFD REVIEW/ANALYSIS: REQUIRES FURTHER ACTION?	NO	YES	COMMENTS
Explosives Safety	X		
Airfield Safety	X		
Electromagnetic Radiation	X		
AICUZ Violation	X		
Change to Approved Master Plan/CIP	X		
Coastal Zone Management	X		
Natural Resource Plan	X		
Dredging/Filling Permits	X		
Wetland/Floodplain	X		
Hazardous Wastes On Site	X		
Cultural Resources Impact	X		
Other Site Problems (List)	X		
Utilities Support	X		
Roads Parking	X		
Preliminary Environmental Assessment	X		
Preliminary Hazards Analysis	X		
Other (List)	X		

EFD Validation:

Site Approved: Yes ____ No ____ Deferred ____

Name:

Project Supported by SFPS: Yes __X_ No ____

Date:

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